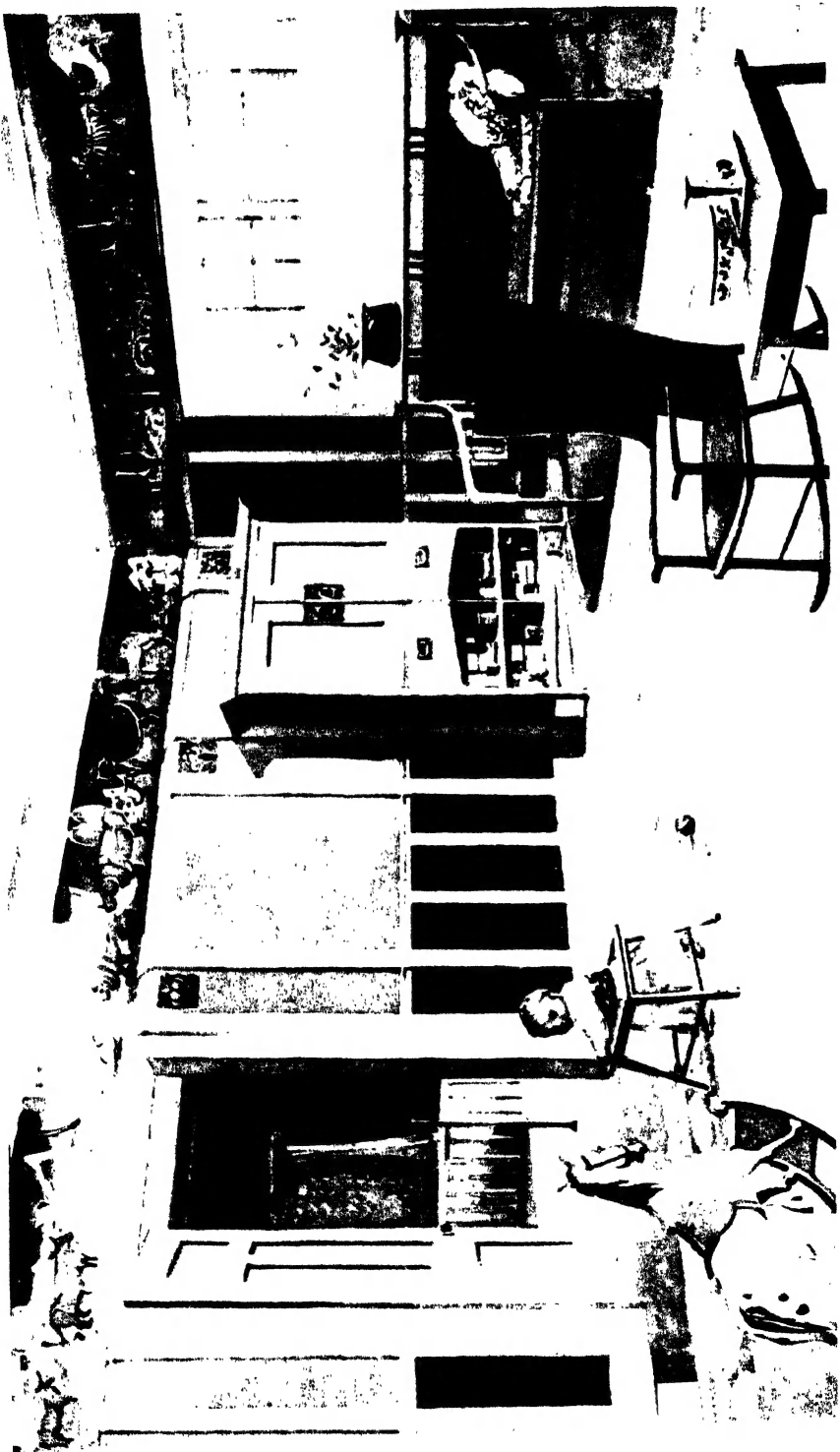


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THE BOOK OF THE HOME

A Comprehensive Guide on all
matters pertaining to the Household

NEW EDITION

Prepared under the Editorship of
MRS. C. E. HUMPHRY
(*"Madge" of Truth*)

With Contributions by
Many Specialists

VOLUME V

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CONTENTS.

VOLUME V.

ENTERTAINING.

	Page
INTRODUCTORY - - - - -	1
VISITING CARDS - - - - -	2
THE ETIQUETTE OF PAYING AND RECEIVING CALLS. Formal Calls —What Cards to Leave when Calling—Leaving Cards on Special Occasions— Etiquette for Bride after Marriage--Etiquette of Afternoon Calls - - -	3
INVITATIONS. General Rules regarding Invitations—Invitations to Balls— Invitations to At Homes—Wedding Invitations—Invitations to Dinner— Invitations to Afternoon Parties—Refusal of Invitations—Informal Invitations —When Invitations should be Issued—Usual Hours for Parties - - -	6
THE ART OF ENTERTAINING. General Hints to Host and Hostess—Intro- ductions—The Duties of Sons and Daughters - - - - -	11
DINNERS. Dinner Etiquette—Menus—Arrangement of the Menu—The Cook's Preparations—What Wines to Serve—Laying the Table—Waiting at Table -	13
TABLE DECORATION. Background—Choice of Flowers—Hints on Arranging —Suitable Receptacles—Centre-spreads--Menu Cards--Floral Schemes - -	18
EVENING RECEPTIONS. A Formal Evening Party—A Spoon-and-Fork Supper—A Convenient Buffet - - - - -	25
AFTERNOON AT HOMES AND TEAS. Receptions—At Homes—Menu for Afternoon At Home—Refreshments at Small Parties—Waiters and Waitresses -	28
LUNCHEONS. Etiquette of Luncheons—Luncheon Menus—The Service of Luncheons—Wines—Decorations - - - - -	29
SUPPER PARTIES. The Service of Suppers—Supper Menus—Wines - - -	31
GARDEN PARTIES. Invitations—Dress—Reception—Refreshments—Amuse- ments—Accommodation for Guests—Leaving - - - - -	32
DANCES. Invitations—Preparation of each Room—Dress—Arrival and Reception of Guests—Entertainment of Guests—Management of the Dancing—Refresh- ments—Subscription Dances—Bachelors' and Spinsters' Dances—Stable Accom- modation—Departure of Guests - - - - -	35

GUESTS STAYING IN THE HOUSE. Hints to Hostess and Guest—Tips— Shooting Parties—Week-end Visits—Informal Visiting—Invitations—Time of Arrival and Departure—Meeting Guests—Etiquette of Shooting or Ball Parties —Management of Guest-chambers—Duties of Servants - - - - -	40
--	----

LOCOMOTION.

RIDING AND DRIVING. Horse and Carriage—Purchase of a Horse—Pony and Cart—Rubber Tyres—Treatment and Care of Horses—Care of Carriage —Harness—The Stable—The Loft—The Coach-house—Harness-room—Coach- man - - - - -	44
CYCLING. Choice of the Bicycle—The Weight Question—Change-speed Gears— Tyres—Punctures—Saddles—Lamps—Brakes—Learning to Ride—Tricycles -	54
MOTORS AND MOTORING. The Selection of a Car—Tyres—Garage—Petrol —Legal Aspects - - - - -	63

DOMESTIC PETS.

THE DOG.

DIFFERENT KINDS OF DOGS. Basset—Beagle—Bloodhound—Bull-dog— Bull-dog, French—Bull-dog, Miniature—Chow-Chow, Chinese—Collie—Dachs- hund—Dalmatian—Dandie Dinmont—Dane, The Great—Deerhound—Fox- hound—Greyhound—Greyhound, Italian—Griffon, The Brussels—Japanese Chin Dog—Mastiff—Mexican Hairless Dog—Newfoundland—Pekingese— Pointer—Pomeranian—Poodle—Pug—Retriever—Sheep-dog, Old English— St. Bernard—Schipperke—Setter, Black-and-Tan—Setter, English—Setter, Irish —Spaniel, Clumber—Spaniel, Cocker—Spaniel, English Water—Spaniel, Field —Spaniel, King Charles—Terrier, Airedale or Waterside—Terrier, Bedlington —Terrier, Black-and-Tan—Terrier, Bull—Terrier, Clydesdale—Terrier, English White—Terrier, Fox—Terrier, Irish—Terrier, Maltese—Terrier, Scotch—Terrier, Skye—Terrier, Welsh—Terrier, West Highland White—Terrier, Yorkshire— Whippet—Wolfhound, Irish—Wolfhound, Russian, or Borzoi - - - - -	68
---	----

GENERAL MANAGEMENT OF DOGS. Kennels—Bedding—Feeding Dogs— Exercise—General Treatment in Health - - - - -	89
--	----

THE DOG IN SICKNESS. Asthma—Canker of the Ear—Chorea—Cough— Cramp—Diarrhea—Distemper—Eczema—Epilepsy—Jaundice—Mange—Piles —Rabies—Rheumatism—Worms - - - - -	91
---	----

THE DOG IN TRAINING - - - - -	98
--------------------------------------	----

CONCLUSION - - - - -	99
-----------------------------	----

THE CAT. Varieties of Cats—Treatment—Distemper—Influenza—Eczema— Catarrh—Tuberculosis or Consumption - - - - -	100
--	-----

CAGE BIRDS.

CANARIES. The Yorkshire—The Lancashire—The Scotch Fancy—The Belgian—The Norwich—The Lizard—The Border—The Crest—The Cinnamon —The German - - - - -	103
---	-----

GENERAL MANAGEMENT OF CANARIES. Food and Water—The Cage— Diseases - - - - -	106
---	-----

	Page
OTHER CAGE BIRDS. British Birds—The Goldfinch—The Linnet—The Chaffinch—The Bullfinch—The Soft Bills—The Skylark—The Blackbird and Thrush—Magpies, Jackdaws, and Jays—Foreign Birds - - - - -	107
MONKEYS AND MARMOSETS - - - - -	109
RABBITS. Treatment—Food—Hygiene—Maladies and Remedies - - - - -	110

HOME OCCUPATIONS FOR PROFIT.

BEE-KEEPING. The Profits of Bee-keeping—How to Start Bee-keeping—The Management of a Swarm—Harvesting the Honey—Marketing the Honey—The Use of the Extractor—Wintering the Bees—Diseases of Bees—How to Handle Bees - - - - -	112
JOURNALISM AND LITERATURE. How to Begin—How to Obtain Journalistic Work—Illustrated Articles—Remuneration—Sending out MSS.—Authorship—Literary Societies - - - - -	117
MARKET GARDENING. Fruit under Glass—Vegetables—Fruit—Flowers—Seeds - - - - -	123
POULTRY-REARING FOR PROFIT. Prospects of Poultry-Rearing—Breeds of Fowl—Preparing Poultry for the Table - - - - -	129
SPINNING AND WEAVING - - - - -	131
THE ART OF ILLUMINATION - - - - -	133
ETCHING - - - - -	135
COLOUR WOOD-BLOCKS - - - - -	136
THE ART OF BOOKBINDING - - - - -	137
METAL-WORK AND ENAMELLING - - - - -	138
LITHOGRAPHY - - - - -	141

THE FIRST BABY.

THE CARE OF THE MOTHER'S HEALTH. Food—Pure Air—Quiet—Skilled Attendance - - - - -	143
THE BABY'S OUTFIT. Clothing Required—Cost—Woollen Clothing—Bassinet and Basket - - - - -	145
THE NURSERY. Choice of a Room—Pure Air—Temperature—Precautions - - - - -	149
THE CARE OF THE INFANT AFTER BIRTH. Warmth—First Things to be Done after Birth—Weighing and Measuring - - - - -	152
THE FATHER'S DUTY. Registration of Birth—The Law as to Vaccination—Vaccination and Small-pox—Importance of Thorough Vaccination - - - - -	154
NURSES. A Nurse's Qualifications—The Mother's Supervision—Wet-Nurses' Qualifications—Treatment of those Nursing - - - - -	157

THE CARE AND MANAGEMENT OF INFANTS.	Bathing—Precautions in Bathing—Importance of Sleep—Dressing—Breast and Hand-feeding—Mixing the Milks—Unwholesome Diet—Animal Milks Used—Preparation of Cow's Milk—Condensed Milk—Rules and Precautions—The Feeding-bottle—Other Infant Foods—Weaning—Physical Development—Perambulators and Mail- Carts	160
BABY AILMENTS.	Breast, Inflammation of—Bronchitis—Chafing—Child Crowing—Colic—Constipation—Convulsions—Croup—Diarrhœa—Eyes, Inflammation of—Flatulence—Head Swellings—Navel, Oozing from—Teething —Thrush—Supplementary Suggestions	174

MANAGEMENT OF CHILDREN.

MEALS.	During Second Year—From Second to Fifth Year—Beyond the Fifth Year	178
LESSONS.	Lesson Hours—Overwork	180
EXERCISE.	Outdoor Exercise—Indoor Exercise—Forms of Exercise	181
DISCIPLINE AND EARLY TRAINING.	Management—Temper in Children —Punishment	182

CHILDREN'S DRESS.

IMPORTANCE OF PROPER CLOTHING.	Underclothing—Chemise—Child- ren's Knickerbockers or Drawers—Girls' Knickerbockers—Combinations— Nightdress—Boy's Print or Flannel Shirt—Flannel Shirt	185
GIRLS' DRESSES.	Girl's Yoked Dress—Girl's Yoked Bodice—Girls' Dressing- gowns—Girl's Circular Cape	191
BOY'S SERGE SUIT		196
MILLINERY FOR YOUNG CHILDREN.	Child's French Bonnet—Child's Dutch Bonnet—Tam o' Shanfers	196
ADAPTATION OF GARMENTS		199

CHILDREN'S AMUSEMENTS.

TABLEAUX.	Children's Plays—Impromptus—Christmas Amusements—Child- ren's Bazaar	202
PARLOUR GAMES.	Shakespeare Game—Aunt Hulda's Courtship—Con- sequences—Bouts Rimés—Rhymes—Blind Man's Buff—Shadow Buff—General Post—Charades—Dumb Crambo—Living Wax-works—Who am I?—Forfeits	209

EDUCATION.

I. EDUCATION OF BOYS.

	Page
INTRODUCTORY. The Choice of a School—Scholarships—Obtaining information - - - - -	215
VARIOUS KINDS OF SCHOOLS. Day and Boarding Schools—Private Tuition—Public Schools—Grammar Schools—Christ's Hospital—Mixed Schools—Private Schools—Other Schools—Schools for the Abnormal and Defective—Public Education in England and Wales—Public Education in Scotland—Public Education in Ireland - - - - -	217
PRIMARY AND SECONDARY EDUCATION. The Three Stages of Education—Continuity of Education - - - - -	221
PREPARATORY EDUCATION. Kindergarten—Preparatory Schools - - -	223
SECONDARY EDUCATION. Lines of Study—Duration of Secondary Education—Examinations - - - - -	223
FINAL EDUCATION. Classes of Professions - - - - -	225
THE PUBLIC SERVICE - - - - -	225
TECHNICAL EDUCATION. Importance of Special Training—Training for Handicrafts—Higher Technical Education - - - - -	226
COMMERCIAL EDUCATION. Training for Clerkships—Higher Commercial Education - - - - -	229
EDUCATION FOR THE LEARNED PROFESSIONS. The Learned Professions—Detached Colleges—University Education—Examining Universities—Teaching Universities—Residential Universities - - - - -	230
FOREIGN EDUCATION - - - - -	233
SUPPLEMENTARY EDUCATION. Evening Schools—University Correspondence—University Extension—Home Reading Union - - - -	234
RECENT EDUCATIONAL PROGRESS. England—Wales and Monmouthshire—Scotland—Ireland - - - - -	237
THE RECONSTITUTED LONDON UNIVERSITY - - - - -	242
TRAINING IN AGRICULTURE - - - - -	244

II. EDUCATION OF GIRLS.

GENERAL EDUCATION. Private Tuition—Day and Boarding Schools—Endowed Schools—Private Schools—Proprietary Schools—High Schools—Polytechnic Schools—Public Elementary Schools—Final Education—Technical Education—University Education—London University and Metropolitan Colleges—Other Universities—Other Institutions for Advanced Work—Supplementary Education—Scholarships - - - - -	245
CONTINENTAL EDUCATION. France—Germany—Austria-Hungary—Belgium—Italy—Other Continental Countries - - - - -	258

LIST OF PLATES.

VOLUME V.

	Page
NURSERY (by Waring and Gillow, Ltd.) (<i>Coloured</i>) - - -	<i>Frontispiece</i>
VISITING CARDS - - - - -	2
TABLE DECORATION—AUGUST (<i>Coloured</i>) - - - - -	18
SCHEMES FOR TABLE DECORATION - - - - -	24
TYPICAL PRIVATE CARRIAGES - - - - -	50
TYPES OF BRITISH DOGS (<i>Coloured</i>) - - - - -	68
SOME TYPICAL CATS - - - - -	100
CAGE BIRDS (<i>Coloured</i>) - - - - -	106
METAL AND ENAMEL WORK - - - - -	138
BABY GARMENTS - - - - -	146
NURSERY FRIEZES - - - - -	150
PATTERNS FOR CHILDREN'S DRESS (Plates A to D) - - -	186

ENTERTAINING.

The instinct of hospitality is one which exists, though to a varying degree among different peoples, in the breast of every normal human being, and from the fundamental desire to show hospitality springs the desire to entertain. The strict meaning of the word hospitality is "kindness to strangers", while the meaning of the verb to entertain is "to receive and treat with hospitality, to engage the attention, and to occupy it agreeably; to maintain, to harbour, to cherish, and to amuse". When the real meaning of hospitality and entertainment is understood, and host and hostess are actuated by right motives, the giving of entertainments becomes a virtue, and not, as is too often the case, a mere excuse for ostentation, the furtherance of social ambition, and the display of extravagance.

Although entertainments given from such motives are to be deprecated, it must be admitted that circumstances sometimes necessitate gorgeous and stately functions. At the same time, it is to be deplored if the existence of such entertainments should tend to raise the standard of luxury, and thereby deter persons of no great social standing and of moderate income from offering to their friends and acquaintances any hospitality which it is in their power to show. For the encouragement of would-be hostesses in such a position, it may truly be said that small informal festivities are often the most enjoyed and appreciated. Be the income small or large, however, the giver of any entertainment should make herself acquainted with certain rules, a knowledge of which is necessary to success.

Other times, other manners. And fashions change in entertainments as in other things. For instance, the wedding reception and tea have long superseded the wedding breakfast. In what is known as "the smart set" of London society alterations and innovations are constantly taking place, but among the generality of well-bred people certain broad rules have been, and will be, accepted as correct for many years.

Varying degrees of significance attach to certain forms of entertainment, but dinners still maintain their former dignity, and are considered in Britain of more social importance than other forms of hospitality. Next in consequence to the dinner-party comes the ball, an expensive form of entertainment rarely given except by the possessor of a large income and a large acquaintance. Dances, evening parties, and afternoon receptions follow in the order of precedence; while such informal parties as luncheons, little dinners, and teas complete the list of social festivities.

Before, however, any entertainments can be given, a basis in the shape of a circle of acquaintances must exist. It was in order to form a circle of acquaintances that the fashion of making and receiving afternoon calls was introduced. Certain recognized customs prevail in this matter. In the case of a young married couple dwelling in a town or its environs, the relatives of both families, and the former friends, would naturally call upon the bride, and then extend some hospitality to the newly-married pair. Thus new acquaintances would be made, some of whom would ask permission to call. In the country etiquette is somewhat different. When new-comers arrive, it is usual for a lady of good position in the neighbourhood to be the first to call, if she is satisfied as to their social status. If she makes a favourable report, her friends follow suit.

A difficulty arises when persons of small means settle in an entirely new neighbourhood, for then, unless introductions have been procured, it is probable that only the clergyman of the parish, and perhaps a few more or less undesirable people anxious to make new acquaintances, will call. In London and in other large towns, and in the suburbs, one lady does not call upon another without some previous introduction.

A necessary complement to the paying of calls is the leaving of cards.

VISITING-CARDS.

The *raison d'être* of visiting-cards is simple. They are used merely to represent the person with whose name they are engraved. For instance, Lady A. calls on Mrs. B., who is not at home. When Mrs. B. returns, the cards which Lady A. has left acquaint her with the fact that Lady A. has visited her. This, though a small matter, is to some extent an important one, inasmuch as a visit demands a return visit. If the name of the caller were merely entrusted to a servant it might be forgotten, and no record of the visit would remain. A return call would not be paid, and no acquaintance would be formed.

Custom demands that certain rules be observed as to the shape, size, and appearance of visiting-cards. They should be of white cardboard of medium thickness, with plain edges, and absolutely devoid of any ornamentation. Fancy printing or any other lettering than that known as "copper-plate" is not correct. A lady's card should measure about $3\frac{5}{8}$ by $2\frac{3}{8}$ inches, a gentleman's card about 3 inches by $1\frac{1}{2}$. The name should be inscribed in a moderate-sized copper-plate in the centre of the card, and the address in the lower left-hand corner.

Should the owner of the card possess both a town and country house, the two addresses may be printed one in each of the lower corners; while in the case of a gentleman who belongs to a club, its name is printed in the lower right-hand corner.

The husband's name should not be printed on his wife's card, but the

Mr Charles Wilkinson.

28. Park Road. S.W.

Fig. 1.

Mr Charles Wilkinson.

28. Park Road. S.W.

Mr T. Haworth.

5. Sydney Street. W.

Lullingstone. Manor.

Fig. 3.

Mr Hugh Barrington.

42. West Road. S.W.

Carlton Club.

Wm. H. Mather
Hess Mather

95. Park Gardens, N.Y.

Fig. 5

Friday's

Lady Reynolds.

56. Eaton Square, S.W.

Fig. 7.

Wm. Henry Sewall.
Hess Emily Seymour.

" Hudson River, N.Y.

Fig. 6

VISITING CARDS

name of a daughter who is "out" should appear below that of her mother on the latter's card.

Should there be two grown-up daughters, the names may be printed separately, or "The Misses Walker" may be inscribed below their mother's name. A young lady does not have cards of her own unless she is a motherless daughter, and even then a girl so situated is generally chaperoned by a relation or intimate friend, her name being printed on the card of her chaperon. When a young girl is on a visit, if it is necessary for her to pay a call on a friend of her hostess, her name should be written in pencil underneath that of her temporary chaperon; and if she has occasion to leave cards on a lady unknown to her chaperon, she should leave her chaperon's card, with the name of that lady struck through with a pencil line.

A motherless young lady living with, and acting as hostess for, her father or brother, might, after the age of twenty-five or twenty-six, have her own cards, but such a course would scarcely be correct if pursued by a younger woman. An exception to this rule is made in the case of a girl who follows a profession and lives by herself; then the laws of society are not, for obvious reasons, so strictly enforced.

On the card of a lady who observes a regular At Home day, "Thursdays", "1st Thursdays", "Mondays in November", or whatever days are decided upon, may be printed or pencilled across the top left-hand corner. This is a fashion which is not altogether to be recommended; of the two courses, it is better to adopt that of writing the words in pencil. If any change of address is made on a card, it should be written in pencil. Such alterations are supposed to be temporary; otherwise new cards should be engraved with the correct address.

When several sisters, whose parents are dead, live together, the eldest is regarded as the hostess. If they are all grown up, they should have separate cards; but if the younger members of the family can still be looked upon as "girls", their names should be printed on the card of the eldest sister.

All gentlemen, married or single, have their own cards. It is quite incorrect, even in the case of a young unmarried man, to omit the prefix Mr.

THE ETIQUETTE OF PAYING AND RECEIVING CALLS AND OF CARD-LEAVING.

Formal Calls.—Calls are paid between three and six o'clock in the afternoon. A first call, which is of necessity formal, should not extend beyond ten or fifteen minutes, and should, if possible, be paid between 3.30 and 4.30. After the first call it is not necessary to observe quite such strict etiquette. In some cases an acquaintance is begun by a formal leaving of cards, and not by a call. Cards should be merely handed to the servant with the words "For Mrs. Brown", but when a call is made the enquiry

would be, "Is Mrs. Brown at home?" It is important that the servant should be taught to distinguish between a call and the leaving of cards, as it would be considered "bad form" to return the leaving of cards by a call, or a call by merely leaving cards. A lady who has been asked, or who has herself begged for permission to call on another lady, should pay a personal call, as this is considered more complimentary than a formal leaving of cards.

Formal calls should be paid once or twice a year on all acquaintances. Between friends, who presumably see each other with some frequency, regular and formal calling is unnecessary.

What Cards to Leave when Calling.—When one married lady calls upon another married lady who is not at home, she leaves one of her own and two of her husband's cards—one of the latter for the lady and the other for the gentleman. If the hostess is at home, only her husband's cards should be left. If a gentleman accompanies his wife to pay a call, and the hostess is in, he leaves one card for the host if absent. When the host is at home it is unnecessary to leave any cards.

When a married lady calls on a widow and finds that she is not at home, she should leave one of her own cards and one of her husband's. When a brother and sister, or father and daughter, are host and hostess, a married lady should leave the same cards as if she were calling on a husband and wife. A mother whose son lives at home may leave his cards when paying calls on acquaintances known to him. A widow living with her son, who is therefore in the position of host, should leave his cards in the same way as she would leave her husband's were he still living. When two ladies reside together, a card should be left for each.

A lady does not leave cards on a gentleman, with two exceptions—one being when an entertainment has been given by a bachelor in his own house, and the other in the case of a formal and official call upon an ambassador. A gentleman does not leave cards on a young unmarried lady living in her mother's house; but if a young lady acts as hostess to one of her male relatives, cards would be left on her as on a married lady.

Gentlemen are not expected to go out calling with their wives, though if it is desirable to be particularly complimentary the husband may accompany his wife. This is done more often in the country than in town. An unmarried man, when calling on a married couple, leaves two cards: when calling on a lady living with her father or brother, two cards; and when calling on a spinster lady, one card.

When paying a call, if the lady of the house is not at home, the caller may turn up one corner of her card, thereby signifying that the visit was made in person.

Leaving Cards on Special Occasions.—Cards should be left after formal entertainments, such as balls, dinners, at homes, luncheon parties, and weddings, whether the invitation is accepted or not, and it is etiquette to do so within a week or ten days of the entertainment. It is not necessary to leave cards after an informal luncheon or afternoon tea, though an unmarried

man who lunches with an acquaintance for the first time should call or leave cards soon after, to show that he appreciates the civility paid to him, and that he wishes to continue the acquaintance.

Cards of enquiry should be left in the case of an illness or death, and the words "to enquire" should be written at the top. It is usual for a lady to leave her card on another lady after an *accouchement*, but it would not be correct in this instance for a gentleman to leave his card. Cards of enquiry are returned by a call. If a death has taken place, it should be made when the deep mourning is over; or if after an illness, when the convalescent is able to resume her social duties.

It is considered incorrect to send cards by post, though in the country, after an illness or death, cards with the words "With thanks for kind enquiries" upon them, might be despatched by post to those friends living at a considerable distance. In London, those people who have a large acquaintance often send their men-servants to leave cards of enquiry, or in acknowledgment of invitations. It is also correct for persons coming up to London for a short time to leave cards on their friends, otherwise a long time might elapse before the presence of the new arrivals was known. Cards with the letters P.P.C. (*pour prendre congé*) are left when the sender is leaving a town or neighbourhood for good, or for a long stay abroad.

Etiquette for Bride after Marriage.—Some doubt seems to exist as to the proper procedure for a bride. She must not send out cards at the time of her wedding; nor is it correct for her to announce her home-coming after the honeymoon by giving an "At Home". She must wait for her friends and acquaintances to call upon her, and return their calls in due time. She will be wise if she arranges to be in during the afternoon for a week or two after she is settled in her new home, in order that she may make the acquaintance of friends of her husband's family. Tea should be offered between the hours of four and six, but it is not correct to hand wedding-cake.

Etiquette of Afternoon Calls.—It is well that every lady should understand the etiquette of afternoon visiting, and be able to instruct her servants if they appear deficient in the necessary knowledge. The hostess should, after luncheon, tell her servant whether she is "at home" to visitors or not. When they present themselves the servant should answer the bell promptly and open the door wide. If her mistress does not intend to receive callers, the servant should merely reply "Not at home" to the query "Is Mrs. Brown at home?" The caller will then hand in the cards, which the servant should take in her hand. If the caller is driving and has not a footman, the servant, if a man, must help her into the carriage, shut the door, and ask for the coachman's directions. In any case, the servant must stand by the open hall-door until the caller has moved some distance away. The words "Not at home" are merely a society formula, and do not necessarily mean that the lady of the house is out, but that she cannot receive visitors.

When the lady is at home, the servant should reply in the affirmative,

and step back to allow the visitor to pass into the hall. She should then shut the door and precede the visitor on the way to the drawing-room, pause outside the door and ask, "What name, if you please?" open the door wide, stand aside and announce the name distinctly. If after four o'clock, tea should be taken in; and when the bell rings she should wait in the hall to give the visitor her umbrella or cloak, open the door, and call a hansom if required.

A visitor should never be allowed to wait on the door-step. If there is any doubt as to the hostess's being in, the servant should say, "Will you come in, please, and I will enquire if my mistress is at home?" If she is not, the servant should return and say, "I find that my mistress is not at home".

It is most important that the servant should be polite and properly trained, for nothing gives a worse impression than ignorance or incivility.

INVITATIONS.

In the matter of invitations, as in all other social matters, there are certain hard and fast rules which must be observed, otherwise a reputation for ignorance of *les convenances* will result.

Invitations to formal entertainments should be printed on cards. The cards should be white, without ornamentation, and printed in copper-plate.

General Rules Regarding Invitations.—Formal invitations should not be given to a christening, a funeral, a luncheon party, or a small afternoon tea. In the case of impromptu or small informal parties, it is usual to write notes, or to send invitations written on visiting-cards. An invitation to a wedding may be printed on a small sheet of note-paper or on a card, but ornamentation of any kind is not in the best of taste. The name of the host appears on a wedding invitation, and also on a formal invitation to a dinner party; with these two exceptions only the name of the hostess appears.

When the host is a widower with a young daughter, all invitations are issued in the father's and the daughter's names, and the same rule is observed in the case of a brother and sister who live together. When the lady is of age to dispense with a chaperon, the invitations are despatched in her name.

One invitation suffices for husband, wife, and daughters, but separate invitations are given to the sons of a family. The words "and party" are added in the case of garden parties, country balls, and cricket matches. It is understood, however, that a lady bringing a party to a ball will secure an equal number of men and ladies, or perhaps one or two extra men.

Invitations should be answered at once. It is a moot point whether it is necessary to answer a printed invitation to an "At Home" unless the

ENTERTAINING.

letters R.S.V.P. appear upon it; but if the slightest doubt is felt it is wiser to send a reply. In smart London society considerable laxity is shown in the matter of answering invitations, but silence is not particularly polite, and by no means popular with hostesses.

Invitations to Balls.—An invitation to a ball should be in this form:—

[Write here name of guest.]

Mrs Smith-Jones,

At Home,

[Date.]

26 Belgrave Square.

Dancing 9.30.

Fig. 513.

An acceptance to a ball invitation must be written on ordinary note-paper, and should be worded as follows:—

Mr., Mrs., and the Misses Jones accept with pleasure (or have much pleasure in accepting) Mrs. Smith's kind invitation for Tuesday, Nov. 16th.

Invitations to At Homes.—An invitation to an “At Home” is printed in the same manner as that for a ball, but the word “dancing” is, of course, omitted. If a well-known professional entertainer has been engaged to perform, it is usual for the name to be printed or written in the right-hand bottom corner; should some other attraction, such as theatricals or palmistry, be provided, the fact would be notified in like manner. Invitations and acceptances to large afternoon parties are worded in precisely the same fashion as those to balls.

Wedding Invitations.—An invitation to a wedding should be worded thus:—

*Mr. and Mrs. Thompson
request the pleasure of*

*Alice, with Mr. Peter Morrison at St. Paul's,
Knightsbridge, on Thursday, Dec. 6th at 2.30,*

R.S.V.P.

Fig. 514.

If the wedding takes place at an hotel, or at the house of a friend, the address to which the acceptances are to be sent should be printed in the left-hand bottom corner.

The correct form of acceptance to a wedding is as follows:—

*Mr. and Mrs. ——— accept with pleasure Mr. and Mrs. Thompson's
kind invitation to the wedding of their daughter with Mr. Peter
Morrison, on Thursday, Dec. 6th.*

When the bride has only one parent, the invitations must be sent out in his or her name, as:

Or, *Mr. Babington requests the pleasure, &c.*
Lady Jenkins requests, &c.

Invitations to Dinner.—When a formal dinner party is given, the invitation may be printed on a card, or written on a sheet of note-paper, and runs as follows:—

*Mr. and Mrs. Ellis James request the pleasure of Mr. and Mrs.
———'s company at dinner, on Wednesday, June 30th, at 8 o'clock.*

Invitations to Afternoon Parties.—Invitations to tennis parties, garden parties, and afternoon “At Homes” are printed in the same manner as ball invitations. If the words “and party” are added, the invitation runs:—

Mr., Mrs., and the Misses Elliot-Smith and party, &c.

Such an invitation is accepted by a lady who intends to take her visitors to the entertainment in this fashion:—

Mr., Mrs., and the Misses Elliot-Smith and party have much pleasure in accepting, &c.

It is generally understood in the country that “and party” means visitors who are staying in the house.

Refusal of Invitations.—When refusing invitations, some polite excuse, such as a previous engagement, or absence from home, must be pleaded:

General and Mrs. Langley regret that absence from home prevents them from accepting Mrs. Smithson's kind invitation for July 8th.

Or,

General and Mrs. Langley regret that a previous engagement prevents them from accepting, &c.

Formal invitations couched in the third person should be answered in like manner. There are cases, however, when it may be necessary to make some explanation, and then it is often simpler to write a note in the first person. For example, Mr., Mrs., and Miss A. are invited to a ball by Lady B. Mr. and Mrs. A. will be away from home, but do not wish to deprive their daughter of the pleasure. They therefore arrange that she shall be chaperoned by another lady who is going to the ball, and the invitation is answered thus:—

Dear Lady B.,

I regret that we shall be away from home when your ball takes place, otherwise we should have had much pleasure in accepting your kind invitation. My daughter, however, will be at home, and will be delighted to accept it, as Mrs. ——— has kindly consented to chaperon her.

Believe me, Yours sincerely,

Angela A.

Informal Invitations.—Informal invitations are generally contained in written notes, though occasionally they are written on visiting-cards.

Invitations to teas and informal evening parties, and to small dances, are often sent in the latter way:

Capt. and Mrs. Cuttle.

Mrs. Thomas Jones

At Home

Wednesdays in November.

33 Queen Street.

Dancing, 9.30.

The Misses Lancaster.

Lady Ffolett

At Home

Tuesday, Oct. 5th.

33 Green Street.

4 to 7.

It is correct to reply to such invitations formally, or by a note.

For a small dinner, the note should run as follows:—

Dear Mrs. L.,

*It will give us much pleasure if you and your husband
will dine with us on Wednesday, Nov. 5th, at a quarter to eight.*

Believe me, Yours sincerely,

Angela Blank.

Such an invitation should be replied to as follows:—

Dear Mrs. L.,

*We shall have much pleasure in dining with you on
Wednesday, Nov. 5th.*

With kind regards,

Believe me, Yours sincerely,

Edith ———.

An invitation to a smaller tea party might be worded as follows:—

Dear Mrs. L.,

*I am asking a few friends to tea on Saturday next, and
shall be so pleased to see you and your daughter.*

Yours sincerely,

Or, for an evening party:—

Dear Mrs. N.,

We are getting up a little impromptu dance on Tuesday, April the 5th, at 9 o'clock. I hope you are not already engaged, and that you will be able to bring your daughter.

Believe me, Yours, &c.,

Angela Brooklyn.

Such invitations are answered by notes. For instance:

Dear Mrs. ———,

We should much like to dine with you on Monday, but unfortunately we have some people coming to us, and I am afraid we must stay and entertain them.

Believe me, Yours, &c.,

When Invitations should be Issued.—The formality of an occasion may generally be estimated by the notice given. For a wedding, from a fortnight to three weeks should be allowed; for a large dinner, a fortnight; a small dinner, a week to ten days; a large evening party, three weeks; an informal party, a week; afternoon parties, from a week to a fortnight; impromptu parties, anything under four or five days. In the London season, invitations, especially to dinners, are sent out at even longer notice; but a long notice implies an important entertainment.

Usual Hours for Parties.—The generally-accepted hours for various entertainments are as follows:—Ball in town, 10.30 to 3. This is understood, and the hour is not always stated. Balls in the country, 9 or 9.30 to 4. Dances in London, 10.30 to 2. Here, too, the time is generally understood. Dances in the country, 9 or 9.30 to 2 or 3. Evening receptions in town, 10 or 10.30 to 12 or 1, and this being understood, the hours are not stated. Theatricals, 8.30, 9, 9.30, or 10 to 12 or 1. In this case the hour should be mentioned. Dinners, formal, 8, 8.15, 8.30; informal, 7.30 to 8. In the country it is not usual to dine after 8 o'clock. The hour is always stated. Tennis and garden parties, 3 or 4 to 6.30 or 7. Afternoon "At Homes", 4 or 4.30 to 6.30 or 7. The hours are generally stated.

THE ART OF ENTERTAINING.

General Hints to Host and Hostess.—Entertaining is a social art, and one which cannot be learnt in a day. A genuine desire to entertain, and not merely to perform a social duty, will go far to make a good hostess,

but experience and *savoir faire* are also required. When once the elementary rules of etiquette have been mastered, the would-be hostess must exercise her powers of observation, and learn from the parties given by her friends and acquaintances what to do and what to leave undone.

A hostess should be gracious without being gushing. No matter what *contretemps* may arise, she must be serene and smiling. When she has an absent or nervous manner, the guest receives the impression that his presence is undesired, or at all events not appreciated. She should learn to convey a welcome by a look, a hand-shake, and to express in a few well-chosen words her pleasure at seeing some particular person. To be successful she must be a student of character, and therefore able to judge which of her guests will fraternize. She should be sympathetic, able to feel for shy reserved folk and for the young men and maidens who are longing for an opportunity for uninterrupted converse; yet she should have sufficient worldly wisdom not to allow her feeling to run away with her, combining kindness with a just appreciation of social grades and responsibilities. She should cultivate the art of leading the conversation, and of effacing herself gracefully if she finds that her guests are engrossed in each other. She should also be careful, if she is a young woman, to pay due deference to her elderly guests, for courtesy acknowledges the precedence of age, although strict etiquette does not.

Introductions.—In the matter of introductions, the chief difficulty lies in knowing when, and when not, to introduce. The hostess should assure herself that an introduction will be welcome before making it. At large parties it is polite to introduce those people who do not seem to have friends with whom to converse. Such an introduction does not necessitate the continuance of the acquaintance. When two friends meet and talk in the presence of a third, it is courteous to include that person in the conversation; this can often be done without a formal introduction. It is unnecessary to make known to each other persons who are paying a call at the same time; in such a case circumstances must decide what is the best thing to do. If ladies living in the same neighbourhood are not acquainted, they should not be introduced unless they have been asked to meet each other for that purpose.

There are fixed rules as to the manner in which introductions should be made. A gentleman should be introduced to a lady, not a lady to a gentleman. The hostess should say, "May I introduce Mr. Jenkins to you, Mrs. Robinson?" or "Let me introduce Mr. Dash to you, Miss Blank", or "I do not think you know Captain Jones, Lady Grant". A lady of inferior rank should be introduced to a lady of superior position. When the social status is equal, an unmarried lady should be introduced to a married lady, and a young lady to an old lady. A gentleman is introduced to a gentleman in like manner. When a lady introduces her husband to a guest, she should say, "Mrs. L., may I introduce my husband to you?" A gentleman should introduce another gentleman to his wife by saying, "I want to introduce

you to my wife, L.", or, if a formal speech is needed, "Mr. L., may I introduce you to my wife?" A clever hostess, when effecting an introduction, will often start her guests on some topic of conversation; and if two persons are unacquainted with each other, but have many mutual friends, reference to this fact may be made.

The Duties of Sons and Daughters.—When there are grown-up sons and daughters, they must be their mother's aides-de-camp, and must on no account allow their own enjoyment to come before their duty. A girl does not, as a rule, introduce her seniors to each other, but she should, if her mother is giving a ball, be careful to see that the young guests are provided with partners. She should also be ready to talk pleasantly to anyone who is for the moment alone; and she should make known to her mother the fact that any lady has not been taken down to supper, and in every way second her mother in showing hospitality. Above all, the sons and daughters must be taught to pay deference to age and infirmity.

DINNERS.

As already stated, the dinner maintains its prestige as being the most exclusive and complimentary of all social functions. There are several kinds—the large dinner of twenty or thirty persons, which is generally more or less official; the formal dinner of ten to sixteen; and lastly, the little dinner of four to eight, which is generally the most popular of all.

Dinner Etiquette.—To ensure the success of a dinner, the guests must be carefully chosen. To send a learned old gentleman, with a craze for beetles, in to dinner with a young woman who can only chatter of the social events of the day, does not add to the reputation of the hostess, while to ask the Browns to meet their detested neighbours the Smiths is not likely to increase the liveliness of the occasion. Precedence is of great importance at a dinner party. The host heads the procession with the lady of highest rank, and she sits at his right hand. The gentleman of highest rank takes in his hostess and sits at her right hand. The remaining guests must be paired according to their rank. The only exceptions to this rule are when a near relation is of the highest rank, or when it is necessary to make some other arrangement in order that husband and wife may not sit next each other. When arranging a dinner party, relations who see each other every day should not be placed near each other.

It is the duty of the host to introduce to each lady the gentleman who is to take her down to dinner. Should they already know each other, he merely remarks, "Blank, will you take Mrs. D. in to dinner?" In order that no mistake shall be made, he should carry a little slip of paper on which are written the names of the pairs in their right precedence. After dinner the ladies leave the room in exactly the same order as they entered—the lady of highest rank first, the hostess bringing up the rear.

If a large and formal dinner party is given in a town, an awning is sometimes erected, but in any case, in damp and dirty weather, a carriage-roller should be provided. A roller consists of a long strip of matting nailed to a wooden roller at either end, and the price varies from 10s. 6d. upwards. A dinner of twelve or more persons is considered a formal party, and a formal invitation should be issued. The menu is more elaborate and more servants are required, but otherwise the etiquette is in every way the same as it is in the case of a small dinner.

Dinner Menus.—A detailed description is here given of the manner in which a dinner for eight persons should be arranged, with specimen menus for dinners for four to twenty persons. For other menus see *Cookery*, vol. iii.

1. *Menu for a Dinner of 16 to 20 persons—*

- Olives farcies aux Anchois (Olives stuffed with Anchovy).
- Consommé à la Colbert (Clear Soup à la Colbert).
- Bisque d'Huîtres à la Royale (Bisque of Oysters à la Royale).
- Éperlans Frits (Fried Smelts).
- Turban de Poisson à la Moderne (Turban of Fish à la Moderne).
- Crème de Volaille (Chicken Cream).
- Filets de Bœuf au Sauce Raifort (Fillets of Beef, Horse-radish Sauce).
- Quartier d'Agneau (Forequarter of Lamb).
- Sorbet au Rhum (Rum Sorbet.)
- Jambon aux Épinards (Ham with Spinach).
- Crème aux Pralines (Burnt Almond Cream).
- Croustades de Merluche Fumée (Haddock Croustades).
- Glace au Café (Coffee Ice).

2. *Menu for a Dinner of 12 to 16 persons—*

- Potage Tortue Claire (Clear Turtle).
- Whitebait à la Diable (Devilled Whitebait).
- Filets de Saumon (Fillets of Salmon).
- Riz de Veau à la Crème (Sweetbreads).
- Alouettes en Casserole (Casserole of Larks).
- Selle de Mouton (Saddle of Mutton).
- Faisan aux Truffes (Pheasant with Truffles).
- Baba aux Fruits (Baba with Fruit).
- Tartelettes d'Anchois (Anchovy Puffs).
- Glace Vanille (Vanilla Ice).

3. *Menu for a Dinner of 8 to 12 persons—*

- Caviar en Croûtes (Caviar on Toast).
 Consommé aux Pâtes d'Italie (Clear Soup with Italian Paste).
 Filets de Soles aux Fines Herbes (Fillets of Sole with Herbs).
 Crème de Volaille en Aspic (Chicken Cream in Aspic).
 Noisettes de Mouton aux Champignons (Fillets of Mutton with Mushrooms).
 Aloyau de Bœuf braisé aux Huîtres (Braised Sirloin of Beef with Oysters).
 Perdreaux Farcis (Stuffed Partridges).
 Soufflé de Chocolat Glacé (Iced Chocolate Soufflé).
 Quenelles au Fromage (Cheese Quenelles).

4. *Menu for a Dinner of 6 or 8 persons—*

- Bisque de Crevettes (Shrimp Purée).
 Rougets en Caisses (Red Mullet in Cases).
 Côtelettes d'Agneau aux Asperges (Lamb Cutlets with Asparagus).
 Poulet Rôti (Roast Chicken).
 Spaghetti à la Milanaise (Spaghetti, Milan fashion).
 Fruits Frappés au Champagne (Fruit Salad with Champagne).
 Croûtes à la Russe (Russian Croutons).

5. *A simple Menu for a Dinner of 6 or 8 persons—*

- Purée d'Artichauts (Artichoke Soup).
 Filets de Sole au Gratin (Filletted Sole au Gratin).
 Mayonnaise de Volaille en Caisses (Chicken Mayonnaise in Cases).
 Filet de Mouton à la Française (Loin of Mutton).
 Chou de Mer. Sauce Beurre (Sea-kale with Butter Sauce).
 Compote de Poires (Stewed Pears).
 Croûtes de Saumon (Salmon Croutons).

Arrangement of the Menu.—The menu is perhaps the most important item of a dinner party. With regard to the food, there are certain rules which it is well to remember. Give the best that you can afford, and choose a well-cooked, plain dinner, rather than a pretentious and ill-served one. Do not allow the bill of fare to be long; include in it one or two simple, wholesome dishes, in case some of the guests may possess delicate digestions; and impress upon the cook that the hot dishes must be, not warm, but hot, and the cold dishes cold, not tepid.

The order of a formal dinner, nowadays, is as follows:—Hors d'œuvres. Soup. Fish. Entrée. Joint. Sorbet. Game. Sweet. Savoury. Ice.

Dessert. The *hors d'œuvres* and the *sorbet* are often dispensed with. At dinners of less than twelve, an iced sweet is served instead of a sweet and an ice; at dinners of eight or ten, either the joint is omitted, or a joint is served and game is omitted.

Dinners are very much shorter and the menus simpler than they were in Queen Victoria's reign. To draw up a sufficiently substantial menu which will not take more than an hour to serve is an art. At the same time, the dishes must be varied. Two brown or two white meats should not follow each other, and the colour and flavouring of the sauces must also be varied. For example, if mushrooms are employed in the first entrée, they should not be used again, either as a vegetable or as part of the savoury. The appearance of the *plats* must be studied, and the garnishes varied; more important than all, the powers of the cook and of the servants who wait at dinner should be considered. It is manifestly impossible that a single-handed cook can send up an elaborate dinner composed entirely of dishes which have to be made, or even finished, at the last moment. When there are three or four trained pairs of hands in the kitchen, the dishing-up of the menu is simple, but in the case of a cook who, if not single-handed, has only a kitchen-maid or some less experienced person to help her, the bill of fare requires careful consideration. Nowadays, when cold entrées, sweets, and savouries are fashionable, the labours of the cook are lightened. Except in the height of summer, not more than two cold dishes should be served, though in hot weather a cold entrée, joint, sweet, and savoury are sometimes given. In winter it is permissible to serve a cold entrée, and a cold sweet.

It is understood that certain adjuncts are served with certain dishes. They are specified in the Cookery section in vol. iii. Vegetables, also, are served with entrées, joints, and game, but unless they form a component part of a dish—such as *jambon aux épinards*, or *filets de bœuf aux champignons*, for instance—they do not appear in the menu. Salads, which should be served with game and with cold meats, are taken for granted, and are not mentioned in the bill of fare.

As the details of entertaining are apt to puzzle the young hostess, it may prove useful to describe the exact manner in which a dinner should be served and arranged.

The guests having been selected and the invitations accepted, the hostess must arrange the order in which the guests are to go in to dinner, and where they are to sit at the table. Some days before the dinner party, the cook and the parlour-maid should be acquainted with the fact that a dinner party is to take place on a certain day. The mistress and the cook should then arrange the menu in consultation, making it so that it can be prepared by the cook single-handed and served by the parlour-maid. They decide upon the quantities of materials required, and order them in good time. A duplicate menu should be given to the parlour-maid, and she should be instructed with regard to the wine. If she is not an experienced person it will be wise to provide her with a detailed menu, as follows:—

Wednesday, November 8th.

Dinner for 8 persons, at quarter to 8—

	Artichoke Purée.	(Serve from sideboard.)
(Serve Sherry with this Course.)	Fried Bread.	(Hand.)
	Fillets of Sole.	(Hand in Entrée dish.)
(Serve Champagne.)	Mayonnaise of Chicken.	(Hand.)
(Champagne.)	Joint.	(Carve on sideboard, and hand Vegetables and Jelly.)
	Red Currant Jelly.	
(Champagne and hand Sherry.)	Stewed Pears.	(Hand.)
	Salmon Croûtons.	
	Cheese. Butter. Biscuits.	

Clear table, and lay for dessert.

Hand dessert and port, sherry, and claret, and then place wine and dishes on table. Clear sideboard, and leave the room.

Bring coffee and liqueurs, first to ladies in drawing-room, then to gentlemen in dining-room.

With written instructions such as these, the parlour-maid can scarcely make a mistake.

The Cook's Preparations.—The cook, if a methodical person, will perform her share of the work in this manner. In the morning the soup must be made and the croûtons fried; they then only require to be warmed. The fillets of sole should be placed in the cases with the sauce. The mayonnaise of chicken may be finished off, dished up, and placed on ice in a cool larder, and the vegetables and joints prepared and put ready to be cooked. The right number of plates must be heated in the rack, and the dishes arranged on a side table. The cook can then rest for an hour or two in the afternoon, and at dinner-time she will be calm and collected, and able to dish up quickly and neatly.

What Wines to Serve at Dinner.—Few young housewives, when they begin to entertain, have any idea exactly how a dinner should be served, and what wines belong to what courses. They have, perhaps, been accustomed to the ways of a large house worked by trained servants, or of a small establishment and a small income which has not allowed of anything but the most simple living. It may be well to state, therefore, that at a formal dinner sherry is served with soup; hock or chablis with fish; champagne with entrées, and until the sweet; champagne and sherry with the sweet and savoury. At dessert the usual wines are claret and champagne. Liqueurs are served with the sorbet and with the ice, and after coffee.

At smaller parties only sherry, and either claret, champagne, or some other light wine, are served at dinner, and claret at dessert, liqueurs in this case being sometimes served with the ice and also with the coffee.

If the party is unceremonious, claret and sherry, and whisky and soda are sufficient. Mineral waters, especially Apollinaris, should always be at hand.

Laying the Table.—It might at first sight be considered unnecessary to describe the laying of the table in detail, but anyone with experience of the average servant knows how extraordinarily ignorant of the niceties of service she can be. What is called a "cover" is laid for each person. This consists of a table-spoon for soup, fish knife and fork, two large knives, two large forks, and glasses for sherry, champagne, and hock. Extra spoons and forks are added as required. The dinner napkin should be folded simply and placed in the centre of the cover. It is quite wrong to put it in a wine-glass or to arrange it in a fanciful manner. The bread (usually a roll) is placed inside the dinner napkin. Four bread-straws, tied together with narrow ribbon, are often placed at the side of the cover, and rusk or dry toast is handed. At unceremonious dinners, neatly-cut pieces of bread are used instead of rolls.

Waiting at Table.—Dinners are generally served *à la Russe*, i.e. from the sideboard; occasionally, however, the host carves the joint and the game, and in old-fashioned households all the dishes are carved on the table. When the dinner is *à la Russe* the soup, fish, joint, and game are helped from the sideboard, the made dishes handed. The carving is done by the upper servant, and the wine is also handed by her. The under servant hands the plates, the upper the dishes. When the cheese course has been handed the table is cleared entirely, the under servant holding the tray and the upper removing the glasses, &c. The cloth is then brushed. The upper servant puts on the clean glasses and the wine, the other the plates and the dishes. When the sideboard is cleared, both leave the room. Coffee is brought to the ladies in the drawing-room, to the gentlemen in the dining-room.

When teaching servants how to wait at table, it should be impressed upon them that they must move quietly, take no notice of any conversation, and not speak audibly to each other.

When a dinner is being given, one servant should be ready to open the door and put down the carriage-roller, and another to point out where cloaks are to be removed and to announce the guests. At the appointed hour the soup should be brought in, and dinner announced. When the time arrives for the guests to leave, the servants should fetch their cloaks and wraps, put down the carriage-roller for them, and accompany them to their cabs or carriages.

TABLE DECORATION.

The custom of decking the dinner-table with flowers and foliage, fanciful glass, and dainty embroideries—even if the meal to be served is of the simplest—has now become so general that it is very difficult to realize how comparatively modern is the art of floral decoration. The most fashionably-inclined of our grandmothers never aspired to anything



beyond a "massive" silver *épergne* crammed tightly with gaudy bunches of "choice exotics", chosen and arranged by the gardener, to whom hardly garden flowers were but common things, scarcely worth cutting, and the lovely spoils of field and hedgerow altogether beneath contempt.

Perhaps to-day there is a tendency to fall into the other extreme, and to overdo the decorating. Certainly when one is called upon to admire some masterpiece of the average professional florist—some "novel" arrangement of wired flowers twisted into all kinds of impossible positions, with leaves tortured into loops and bows—garnished with stuffed birds and sham butterflies, and served up with china stiles and bridges and owls with candles stuck in their heads, it is impossible not to think with regret of that simpler, if equally inartistic, *épergne*, with its squab bouquets nestling under silver palm-trees! The modern "shop" decoration can be very bad indeed, although the ingenuity displayed in the mechanical part of the work is often marvellous.

Background.—In planning a scheme of table-decoration, there are one or two points which should never be entirely overlooked, although to the novice they may appear unimportant. First, there is the question of background. The colour of walls and hangings, and even the general style of the furniture in the room, should be considered, otherwise the effect of the most ingeniously devised and perfectly executed arrangement may be quite spoilt by its colour and type clashing with what may be called its setting. Broadly speaking, it is tolerably safe to choose yellow as the key-note of a table-scheme in any room in which the general tone is not of bluish-pink or terra-cotta. Yellow and orange look specially well against blue, brown, and certain shades of green—not against sage or olive, however. The choice of red is always justified in a room which is hung with deep green or dark oak brown. Pale pink harmonizes nearly as well with a background of deep crimson as with one of pale apple-green or soft turquoise-blue.

Furthermore, the colour and design of the dinner and dessert services should not be disregarded. Although in these days, when nine people out of ten use plain white or ivory china with a neat monogram or crest as sole adornment, such a hint may seem superfluous, yet some hostesses are obliged to use family relics, heavy of hue and florid of pattern, which would completely "kill" delicate, pale-coloured decorations. Care must be taken to avoid such tones of colour as will not "light up" satisfactorily. Bright pinkish-mauve, for instance, is the only one among the myriad shades of purple which does not lose its brilliancy under artificial light, especially when gas or ordinary paraffin lamps are used. Very pale blue takes a very dingy, sickly hue at night, but a decided shade of turquoise stands the ordeal tolerably well. As greens have a very different appearance when seen by gas-light, spreads and ribbons of this colour should always be tested before they are used on the dinner-table. It is wise to adopt, if at all possible, schemes with which either pink, red, or yellow candle and lamp shades will accord, as they have by far the prettiest effect.

White is, of course, always admissible, but green, mauve, and blue shades are very trying to both gowns and complexions.

Choice of Flowers.—So much for colour; now to consider the flowers themselves. When the supply has to be obtained from a shop or a flower-girl's basket, it is useless to be hypercritical, but the buyer should be careful not to invest in flowers with discoloured stems, slimy, or split at the ends. If the centre-florets of such blossoms as ox-eye daisies, pyrethrums, and scabious are not fully opened out, and if the petals of tulips, narcissi, and the like have a transparent appearance round the edge, it is certain that the flowers are the reverse of fresh. It requires a quick eye to discover the clever "fakes" of the less respectable class of florist, the skewering of broken-off blossoms to stems contrived of fern-ribs and wire or twigs, the adroit devising of gorgeous bouquets out of mere shreds and patches of bloom and leaf, and the many other tricks of the trade; still a little observation will prevent the striking of many a bad bargain. But no flowers are so delightful to arrange as those the decorator cuts for herself—long-stemmed, with plenty of their own (or appropriate) foliage, and at just the right stage of development. They should be gathered early in the morning or late in the evening, never in the heat of the day; and before being arranged they should be put in roomy jars or basins of water and set aside in a shady and cool (but not icy-cold) place for at least a couple of hours. If cut at the joints they retain their freshness longer than if the incision is made at a point between them. Flowers that have been sent by post or rail should have the ends of their stems clipped off before they are put into slightly warmed water for their rest and drink.

Hints on Arranging.—As to the actual manipulation of the flowers themselves—the most important part of the whole business,—it is of little avail to write much, for the science of deft arrangement, of artistic blending, of hitting the happy medium between the painfully formal and the untidily careless, is one which cannot be taught in a whole volume. Yet the experienced decorator is full of "wrinkles" which help her to achieve results that are admirable, even if she has not much art in her soul. The "old hand" knows that judiciously chosen twigs of such bushy shrubs as holly, box, and privet, dropped into deep, wide-mouthed jars or bowls, always difficult to treat successfully, help to steady and keep in position long-stalked blossoms, and she has learnt when to use wet sand or moss as a substitute for water, although she never falls into the novice's mistake of filling a valuable porcelain bowl—perhaps a choice bit of "old blue"—with sand without a covering of oil-silk, or an inner basin of wood or tin, to prevent the grit from scratching the glaze of the ware. With regard to those clusters and wreaths of flowers which fashion at present ordains shall be laid on the cloth, there is the knack of keeping them fresh through the many courses of a smart dinner by packing wet moss adroitly about the stems, and covering it with green oil-silk. The expert, too, generally knows many cunning ways of pressing autumn leaves and ironing them with a bees'-waxed iron, and of varnishing and otherwise preserving all sorts of

berries and seed-pods, so that they may be used to eke out the winter's scanty supply of decorative material.

Suitable Receptacles.—There are, of course, fashions in receptacles for flowers, as in everything else, but unless a very great variety of arrangements is desired, most of the "novelties" appearing in the shops each year can be passed over. If a house-mistress possesses a set of Salviati or Murano vases—the simpler designs in preference to the more elaborate,—another of the beautiful Whitefriars glass, a few bowls and oval dishes of Coalport china, and an assortment of picturesque baskets, she may consider herself well equipped. Old-fashioned champagne glasses, whether cut or engraved, are charming for tall slender-stemmed flowers and ferns, and finger-bowls serve perfectly for roses, while among the cheaper kinds of modern glass the green Nuremberg has some artistic value. Modern Delft pottery goes well with a rather formal style of decoration—red and white tulips, a centre-spread of blue-and-white embroidered linen, and brass candlesticks. The pale blue-and-white Copenhagen porcelain is very delicate and charming, while the cheap bright green Belgian ware, and that of deeper tint which comes from Farnham in Surrey, are both effective in their way. Many kinds of picturesque baskets, other than the hackneyed, if graceful, Louis XVI. shape, which alone appeals to the professional florist, may be used for flowers. The smallest-sized Sussex "trug", for example, stained brown or green, or even silver-painted, and filled with roses or carnations and mignonette, or with autumnal-tinted leaves and berries, makes a pretty centre-piece. The markets of many country towns, especially those of North Devon, are splendid fields for the discovery of quaint, uncommon rustic shapes.

There are many sorts of foreign baskets which can be impressed into the decorator's service, notably the oblong baskets of coarse green and cream rush which come from Japan. Wooden porridge-bowls, stained or painted, bowls of scarlet Japanese lacquer, bowls and lotahs of copper or brass, wicker barrows and bark canoes,—all these may be used as flower-holders, as well as the silver receptacles in which only a few can afford to indulge.

Before entirely quitting the subject, it may be well to hint that when the flowers are set out in very cheap and homely pots and pans, it is not in completely irreproachable taste to use smart silver dishes for bon-bons, salted almonds, &c. It is far better to choose tiny saucers or trays matching the flower-vases if possible: if baskets replace the latter, duplicates on a very small scale, lined with little ruched mats of chiffon, silk, or crêpe-paper, can be used with distinct advantage.

Centre-spreads.—In a book which is intended to be of more than ephemeral value, it is scarcely advisable to enter into elaborate descriptions of the centre-spreads, menu-cards, and other decorative accessories which happen to be the fashion of the moment. It is enough to say that a piece of embroidery really good, both as to design and colour, whether ancient or modern, Oriental or European, may always be fittingly used as a back-

ground for floral decoration, no matter what the special fad or fancy of the day may be, provided, of course, that it is in harmony with the other things on the table.

Again, if the dining-table happens to be a handsome one of polished oak or mahogany, it is always permissible to substitute narrow side and end slips of linen or fine damask for the more commonplace all-over table-cloth. These linen "runners" must, of course, be made beautiful in some way or other, either by means of embroidery on the material itself, with insertions of thick flax-lace, bands of china-work, or with a blending of the three.

A plan which may be mentioned for the special benefit of the economically-minded, is to have a centre-spread of rich white or ivory brocade worked with white silk, gold or silver thread, and spangles, but without any colour. It should be provided with two or three sets of detachable double-frills of chiffon, soft silk, gauze, or Liberty muslin, gathered to narrow tapes, so that, when wanted, they may be pinned or tacked under the edge of the brocade. Pale lemon-yellow, deep orange, and pink are three good shades to choose for these trimmings, and each set should have candle-shades to match it.

Menu-cards.—Menu-cards should not be fantastic or bizarre, and if placed in silver or silver-gilt holders, they can hardly be too severely plain. With certain classes of decorative schemes, however, some departure from this rule is allowable, arrangements in Japanese or Louis XVI. style, for instance, necessitating specially-designed and more or less fanciful menu-tablets. The fashion of inscribing *à propos* quotations on the cards has at least this in its favour—it affords a subject of conversation.

Floral Schemes.—Appended is a list of suggested schemes for table-decoration arranged to suit the different months of the year. For the most part they are not intended to be more than mere indications of colour and flower combinations which have been proved to be effective, but in a few instances the details have been more fully filled in. Some are more elaborate and more expensive than others, in order to suit different incomes.

JANUARY.

1. Centre-spread of scarlet brocade. In the middle a basket of silvered rush filled with leafless twigs and small branches that have been brushed with gum-water and dipped in frosting powder, and sprays of holly and scarlet Van Thol tulips. Cornucopias of silvered rush with flowers and frosted foliage at the corners of the brocade. Silver candlesticks with shades of white silver-spotted gauze.

2. A white scheme. Spread of white chiffon puffed over white satin; frosted foliage and white chrysanthemums in white china bowls of various sizes; white china candlesticks with white shades. Suitable when the dinner-service is very brightly coloured.

3. Christmas roses in silver (or silvered Benares brass) bowls. Clusters of holly and ivy laid on cloth and connected by scarves of soft red gauze. Red shades.

FEBRUARY.

1. Centre-spread of either pale pink brocade or white Liberty satin embroidered in pink; tall clear glass trumpet vase holding pink tulips in the middle; smaller ones near the corners; and, between them, glass bowls filled with violets of every shade of mauve and purple. Silver candlesticks with pink tulip-shaped shades.

2. Scarlet poinsettias in baskets of bright green rush. Trails of asparagus fern laid on the cloth between them. Scarlet shades.

3. Red and white tulips planted stiffly in Delft jars. Dutch brass candlesticks. Spread of white linen embroidered in blue and white. "Dutch tile" menu-cards.

MARCH.

1. Centre-spread of scarlet embroidery; sprays of flowering blackthorn fixed with Japanese leaden holders in bronze jars and bowls. Lamps fitted into bronze jars; shades of painted (Japanese) gauze; bon-bons in tiny bronze trays or bowls of scarlet lacquer.

2. Pink almond blossoms in turquoise blue jars set on pink gauze spread, crossed with trails of brown ivy.

3. Pink anemones, brown ivy sprays in iridescent glass vases.

APRIL.

1. Spread of pale green linen-plush, satin-sheeting, or linen. Brown rush baskets and shaded brownish-green pottery jugs with primroses and catkins. Pottery candlesticks; primrose shades.

2. Daffodils in green and gold Venetian glass vases; clusters of daffodils, tied with pale green gauze ribbon, laid on cloth. Daffodil shades.

3. Clusters of pear-blossom in turquoise-blue bowls, or in brown wicker baskets trimmed with deep yellow gauze.

4. Clusters of pear-blossom, tied with yellow ribbons, laid on cloth. Copper jars of daffodils, between small lamps with yellow shades, fitted into copper lotahs.

MAY.

1. Maypole decoration. Miniature maypole (gilt) fixed in bowl of wet sand in the centre of table. Yellow and white ribbons attached to top of pole and brought down to the table, a small glass vase being placed on the end of each. Pole and streamers wreathed with "mother o' thousands", Japanese honeysuckle, and gypsophila. Yellow and white tulips, or Spanish iris, and ferns round base of pole and in vases.

2. Apple-blossom in bowls of green Belgian ware or in silver-painted sabots, connected by pink ribbons, laid on cloth. Candle-shades of gauze shaded from white to deep pink.

3. Purple lilac in silver, or old-fashioned cut-glass bowls, and purple and mauve iris in vases either of cut glass, or of pierced silver with glass-linings. Pink tulips can replace the iris.

4. Spread of white linen and lace over yellow satin. Yellow iris, white gladioli, and mimosa in white vases and bowls. Yellow (iris-blossom shaped) shades to candles or electric lights.

5. Mimosa, deep yellow tulips, pale yellow azaleas, and brown foliage in large repoussé copper bowls. Copper lamps; deep yellow shades.

JUNE.

1. Spread of white satin embroidered with turquoise-blue and silver. High-handled Louis XVI. baskets of silvered rush, trimmed with blue ribbons and filled with pink and crimson roses. Between the baskets, small clear glass bowls of pink and white sweet peas. Silver candelabra with shaded pink to crimson shades. Silver-edged menu-cards with blue love-knots in corners.

2. Salmon roses and brown foliage in gold-flecked Venetian glass bowls and vases. Salmon shades.

3. White carnations, pink roses, brown foliage, and ferns in white Coalport baskets. Clusters of the same flowers tied with deep crimson ribbons on the cloth.

JULY.

1. Spread of silver-spotted gauze over pale green satin. Shallow glass bowls with water-lilies floating in them, at the corners. Centre vase filled with flowering rushes, forget-me-nots, and meadow-sweet. Smaller vases here and there. Palest pink shades.

2. Deep orange poppies, paler yellow horned columbine or St. John's wort, grasses, ferns, and honeysuckle—in a series of rustic baskets connected by swinging festoons of Japanese honeysuckle and wild clematis. Small vases of poppies and grasses between.

3. At corners, crescent wreaths of nasturtiums of every shade of yellow and tawny-red. Wreath in the centre surrounding green Nuremberg glass vase of eschscholtzias or gaillardias, brown beech leaves and grasses.

AUGUST.

1. Centre-spread of green, mauve, and silver brocade; round silvered basket with high double crossed handles in the middle. Basket wreathed with trails of hops, vine leaves, and green outdoor grapes, and filled with purple violas, scabious, or pyrethrums. Trails of hops laid from centre-basket to smaller ones at corners. Silver vases of purple flowers between. Candle screens of silvered chiffon.

2. Down centre a narrow strip of pale green silk, bordered with leaves of every shade of green and brown set in a foundation of damp moss laid over oil-silk. Green pottery receptacles—odd shapes if possible—filled with ferns and leaves; green pottery candlesticks with shades of pink or red gauze, or small screens of pressed leaves mounted in talc. Scheme more suitable for luncheon than dinner. Turquoise-blue ware may be used with good effect instead of the green.

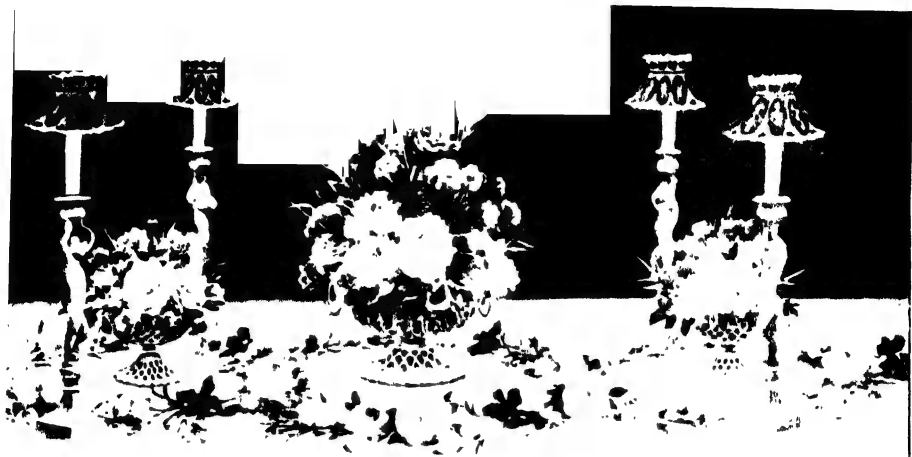
3. Scarlet geraniums, white Japanese anemones, mignonette, purple beet-leaves, brown carrot-tops. White or clear glass vases. Knots of scarlet gauze connecting trails of Virginian creeper and Japanese honeysuckle laid on cloth. Scarlet shades.

4. Blue sea-holly and yellow sweet sultan, coreopsis or small perennial sun-flowers. Or blue holly and pink asters or carnations.

SEPTEMBER.

1. Spread of grey brocade worked up with grey silks and dull silver thread. Small sunflowers (lemon and orange) and brown fuchsia foliage in aluminium vases. Yellow and brown fruit—bananas, plums, apples, pears, nuts, &c.—in aluminium dishes. Aluminium lamps with orange shades. Grey menu-booklets tied with lemon and orange baby-ribbon.





2. Flat star of shaded autumn leaves in centre of table surrounding tall trumpet vase of greeny-gold Clutha glass filled with trails of briony and wild clematis, russet bracken fronds, and sprays of scarlet berries.

3. Scarlet single dahlias, white *Pyrethrum uliginosum*, and carrot-tops in miniature barrows made of brown twigs. Between the barrows, brown ware jugs with sprays of blackberry leaves and bunches of dog-wood or guelder-rose berries.

OCTOBER.

1. Centre of table latticed with sprays of autumnal-tinted leaves of every shade of russet and crimson. Copper bowls filled with purple heather down the middle of the lattice-work. Copper lamps with shades of deep yellow gauze wreathed with shaded leaves.

2. Pale pinkish-mauve chrysanthemums and sprays of reddish oak leaves tied with deeper purple ribbon and laid on spread of shaded mauve chiffon. A pretty luncheon decoration.

3. Deep tawny-yellow chrysanthemums, sprays of the pale yellow-green fading leaves of the Spanish chestnut; trails of Virginia creeper in bowls of carved oak (tin-lined) or miniature pitchers of shaded blue and brown Devonshire ware.

NOVEMBER.

1. Yellow brocade or silk spread. At each corner a flat heart-shaped wreath of berberis leaves, across which is laid a cluster of yellow and red-brown chrysanthemums. Gondola or canoe of gilt basket-work in centre filled with chrysanthemums and leaves. Gilt candlesticks; chrysanthemum shades.

2. Pale green spread. Covered silver setting. Tinted prepared sea-weed in shades of pink in white shell-shaped china receptacles. Sea-weed shades. Shell-shaped menu-tablets. (Suitable when flowers are scarce.)

3. Scarves of scarlet gauze twisted serpentine fashion down the table. Skeletonized leaves, honesty-pods, sprays of scarlet hips or Cape-gooseberry in white enamelled baskets, trimmed with white and scarlet gauze. Scarlet shades.

DECEMBER.

1. Spread of white gauze over satin, much puffed and frilled, edged with ivy trails, holly, and white chrysanthemums. Imitation Yule-log in centre filled with flowers and foliage.

2. Star made of closely-massed Christmas roses edged with ferns and ivy in centre, with tiny fir-tree thickly frosted rising from the middle, or a tall clear glass vase of frosted mistletoe and holly sprays. Silver candlesticks with silvered gauze shades.

3. Bright yellow spread. Christmas roses or white Roman hyacinths in tall vases of gold and white glass; yellow-berried holly in low bowls of the same. Yellow shades.

EVENING RECEPTIONS.

Evening receptions and At Homes, though less expensive than balls or dances, are, if well arranged, enjoyable, and give a hostess of moderate means an opportunity of showing hospitality to a large number of persons.

Invitations to such parties are conveyed on printed cards, on visiting-cards, by notes, and in some cases by word of mouth.

Evening At Homes may be divided roughly into two classes: the large and formal party, where some professional entertainment is provided, and an elaborate supper is given; or the smaller and less formal gathering, when the guests amuse themselves with conversation, and only light refreshments are offered. In London and other towns some hostesses arrange to be at home one evening in each week for a certain period—from 9.30 to 11.30 or 12—and in such a case the entertainment is not expected to be of an elaborate description.

A Formal Evening Party.—For formal parties an awning should be erected, and a man-servant or commissionaire should be in readiness to open the doors of carriages and cabs, and to call cabs at the end of the evening. One servant should be told off to open the door, and two more to attend to the cloak rooms. Tea and coffee should be served on arrival, before the guests proceed to the drawing-room. The hostess should stand at the head of the stairs, or just inside the drawing-room door. The guests talk, and are entertained at intervals with good music, a short play, story-telling, conjuring, &c., professional entertainers being often engaged. At about 11 o'clock supper is served. A menu such as the following is suitable:—

Menu of a Supper for 50 to 200 persons—

Consommé au Profiteroles.	
Mayonnaise de Saumon	(Salmon Mayonnaise).
Petites Bouchées aux Huitres	(Oyster Patties).
Crèmes d'Homard	(Lobster Creams).
Côtelettes de Volaille en Aspic	(Chicken Cutlets in Aspic).
Foie gras en Aspic	(Foie gras in Aspic).
Chaufroid de Cailles	(Chaufroid of Quails).
Galantine	(Galantine).
Bœuf Épicé	(Spiced Beef).
Pâté de Pigeon	(Pigeon Pie).
Poulets Farcis	(Stuffed Chicken).
Gelée Marasquin.	Nougats à la Chantilly.
Pâtisseries.	Macedoine de Fruits.
Bavarois Pistache.	

At a supper such as this small tables should be arranged, and laid with a plate, two knives, two forks and a spoon, a roll, and two glasses to each person. There should be a menu and a vase of flowers on each table. To serve such a supper well, one waiter to every six persons is required. The dishes are placed on a buffet in a convenient position, which is in charge of two or more reliable servants.

A Spoon-and-Fork Supper.—Sometimes it is more convenient to give a spoon-and-fork supper, and then, as the name implies, the dishes must be

such as can be eaten without the help of a knife. If space can be allowed for small tables, so much the better; if not, the viands are arranged on a long buffet, and chairs are placed round the room. The guests partake of the refreshments either sitting or standing, and the gentlemen wait on the ladies.

A Convenient Buffet.—When it is impossible, or difficult, for the servants to remove dirty glass from the room, a buffet consisting of a long narrow table with two shelves underneath should be employed. On the upper of these a stock of clean crockery, glasses, spoons, and forks should be methodically arranged; on the lower, the dirty crockery should be stowed away. If there is space for a table (on which stand a large pail of water, a kettle, and spirit-lamp) to be screened off at the back of the buffet, a servant can be employed to wash up, thus making it feasible to manage with a smaller stock of crockery, &c., than would otherwise suffice.

When a two- or three-tier buffet cannot be procured, large wooden packing-cases might be placed under the tables, and the spare cups and saucers stored in them. If glasses are hired they are packed in wicker trays, and should be kept in these until required. When a large supply of tea and coffee is needed, urns should be hired; for a small party tea can be made as required by the help of a spirit-kettle, and the coffee may be kept hot in a large pan over another spirit-lamp. Ices should be packed in proper ice-pails; but iced coffee can be placed in a jug, the jug placed in a pail and surrounded with crushed ice.

At a party where the gentlemen are expected to wait on the ladies it is wise to place a sideboard or what-not in a convenient position. On it should be a stock of china, glasses, &c., and a space should be left for dirty plates. A servant should be instructed to see that these are removed and clean crockery substituted.

Menu for a Spoon-and-Fork Supper for 30 to 200 persons—

Consommé Julienne (Julienne Soup).

Mayonnaise d'Homard (Lobster Mayonnaise).

Petites Bouchées aux Huîtres (Oyster Patties).

Crèmes de Volaille (Chicken Creams).

Crèmes de Jambon en Aspic (Ham Creams in Aspic).

Salade Nuremburg (Nuremburg Salad).

Torpedoes.

Côtelettes de Lapin en Chaudfroid (Rabbit Cutlets Chaudfroid).

Sandwich Assortis (Assorted Sandwiches).

Chocolat Bavaois (Bavarian Chocolate).

Gelée de Fruits (Fruit Jelly).

Chartreuse d'Oranges (Orange Chartreuse).

Éclairs au Café (Coffee Eclairs).

Meringues.

Compote de Fruit. Petits Fours.

AFTERNOON AT HOMES AND TEAS.

Afternoon At Homes are an inexpensive form of entertainment much in vogue with those ladies who have a large acquaintance and a small income. They vary from a party of 50 to 100 or 200 people.

Afternoon Receptions.—When an At Home attains the latter proportions it is dignified by the title of a reception, and should be arranged in fact in the same manner as an evening reception. An awning is erected, a cloak-room is necessary, and good music or some other entertainment is provided. The refreshments are of an elaborate character, and the invitations are sent out in the form of printed cards.

Afternoon At Homes.—For smaller teas a note or verbal invitation is sufficient. Should the hostess intend to give a series of At Homes (Thursdays in December, or Mondays until Easter, for instance), the fact is generally notified on the visiting-card, as has been explained in the section of this article which deals with invitations. When a large party is given, the hostess receives her guests at the head of the staircase or just by the drawing-room door, while at a smaller party she welcomes her friends in the drawing-room.

Menu for Afternoon At Home.—The following menu shows the kind of refreshments which are provided at an afternoon reception:—

Menu for At Home, 50 to 200 people—

Tea.	Coffee.
Savoury Sandwiches.	
Cakes.	Bread and Butter.
Petits Fours.	Bon-bons.
	Ices.
	Fruit.
Champagne Cup.	Claret Cup.
	Lemonade.

In summer-time Iced Coffee is given, and proves popular.

The savoury sandwiches are very small and cut in various shapes; sometimes tiny fingers and rolls of fancy bread are used. When strawberries are in season they are generally a feature, or if fresh fruit is dear and scarce, a compote of fruit sometimes takes its place. The floral decorations are elaborate, both on the tea-tables and in the reception rooms.

Refreshments at Small Parties.—At smaller parties the ices and champagne cup are dispensed with, otherwise the refreshments are much the same. The hints which are given as to the arrangement of the buffet in the section which treats of evening parties are equally applicable to the arrangement of afternoon parties.

When the guests do not number more than a dozen or so, it is usual to serve tea in the drawing-room, in which case the hostess or one of her daughters pours out tea, and the gentlemen or young girls of the party assist in handing the eatables. Tea and coffee—or for a change chocolate,—

bread and butter, savoury sandwiches, and cakes are provided. The visitors at these informal little teas leave their cloaks in the hall.

Waiters and Waitresses.—Before quitting the subject of party-giving, it may be wise to say a word or two on the question of hired assistance.

When the household is small and the servants are women, it is wiser when possible to engage the services of a waitress. For example, a dinner party of 10 or 12 persons is to be given, and only two women-servants are available for the upstairs work. One more is needed, and it looks far better if this third servant is a woman, dressed in the same uniform of black dress, white cap, apron, collar, and cuffs. At small afternoon parties one or two extra women-servants are generally all that are required. When a large party of any kind is given, and the servants of the house are not sufficiently experienced to take command of the arrangements, it is wiser to entrust the whole matter to professionals. In engaging waiters care should be taken to secure honest and sober men of good appearance, who are accustomed to the ways of a gentleman's house.

LUNCHEONS.

Etiquette of Luncheons.—There are several kinds of luncheons, but in all cases the meal is, or ought to be, more or less informal. Formal luncheon parties by long invitation are a favourite form of entertainment, especially in town. The luncheon of to-day generally takes place in London at 1.30, 1.45, or 2 o'clock; in the country, 1 or 1.30 is the usual hour. It is not necessary that the number of ladies and gentlemen should be equal, and precedence is not of such great importance as at a dinner. When luncheon is announced the hostess turns to the lady of highest rank and says, "Shall we go down to luncheon?", and that lady leads the way, the other guests following in what order they please. The hostess indicates where each of her guests shall sit. When there are children of an age to have their meals downstairs, they and the governess are generally present. Invitations to luncheon are given by note, telephone, or word of mouth.

Luncheon Menus.—As regards the bill of fare, a pleasing variety is shown. For a luncheon party the following menu is suitable:—

Menu of Luncheon for 10 to 18 persons—

Green Pea Purée.

Fillets of Sole in Aspic.

Mutton Cutlets and Spinach. Roast Chicken.

Caramel Pudding.

Gooseberry Tart. Cheese Soufflés.

DESSERT.

Coffee. Liqueurs.

Cold Meats on Sideboard.

Often, however, soup is omitted, and the menu runs as follows:—

Menu for Luncheon Party—

Macaroni au Jus.
Curried Prawns and Rice.
Casserole of Rabbit.
Cold Pressed Beef. Salad.
Jelly. Cheese Cakes.
Cheese. Biscuits. Butter.
Coffee. Liqueurs.

At an informal luncheon to which the guests have been invited by word of mouth, and at short notice, a menu such as this might be given:—

Menu of Informal Luncheon for 2 to 10 persons—

Croquettes. Roast Pheasant.
Cold Beef. Salad.
Sponge Pudding. Chocolate Custard.
Cheese. Biscuits. Butter.
Cake. Fruit.
Coffee.

When there are children, a joint and a plain pudding are generally provided.

Menu of Luncheon for 2 to 10 persons—

Eggs au Gratin.
Roast Mutton. Cold Veal and Ham Pie.
Plain Pudding. Fruit Meringue.
Cheese. Cake.
Coffee. Fruit.

The Service of Luncheons.—The method of serving luncheons varies almost as much as the style of the menu. When a menu such as the first is chosen, it should be served in exactly the same manner as a dinner *à la Russe*. The second menu might be served in precisely the same way, or the sweets, biscuits and butter, fruit, and cake placed on the table, and only the first four dishes served *à la Russe*. Clean plates should then be handed, and the servants should leave the room. In the case of the third menu, all the viands might be placed on the table and carved by host and hostess, the plates and the vegetables being handed by the servants. The table would not be cleared for dessert, fruit plates being merely substituted for the cheese plates. Occasionally dessert is omitted, and only some little dishes of devilled almonds and bon-bons remain on the table throughout the meal.

Wines.—For a luncheon party, hock, saumur, or claret, with sherry and port, rarely champagne, should be given. At an informal lunch, Burgundy or claret, sherry, or whisky and soda or lemon-squash for those people who prefer it, is sufficient. Lemonade and Apollinaris should be in readiness, for many people do not take wine, especially at this meal.

Coffee should always make its appearance, but it is not necessary to give liqueurs. The coffee may be served at dessert, or in the drawing-room.

Decorations.—The table decorations should be simple. Table centres are not often used, and menus and name-cards are dispensed with.

SUPPER PARTIES.

The hostess whose establishment does not allow of dinner parties is often glad to offer hospitality to more or less intimate friends in the form of an invitation to supper. Such a repast is easily managed by one servant, and may be prepared on the previous day. In summer it may consist of cold dishes, but in winter hot soup, potatoes, and perhaps one other hot dish, are usually provided. The hour for supper is 7.30 or 8.

The Service of Suppers.—Suppers, like luncheons, may be served in several ways. Service *à la Russe* is generally chosen, but when the meal is less formal the sweets and savouries are placed upon the table, the soup and cold meats on the sideboard. The servant hands the soup and the wine, changes the plates, and then leaves the room; or if the dishes are placed on the table, she remains to hand the plates. Table centres are often used, and the flowers are more or less elaborate, according to the purse and taste of the hostess. Menus may be provided. Dessert is sometimes given, and coffee always. Liqueurs are a matter of choice.

Supper Menus.—A bill of fare such as the following is suitable for a supper party of 8 to 12 persons:—

Menu of Supper Party for 8 to 12 persons—

(Hot.)	Consommé Pâte d'Italic.
	Crème de Saumon en Aspic.
(Hot.)	Côtelettes d'Agneau.
	Poulet Farci. Bœuf Épicé.
	Pouding d'Orléans.
	Petites Crèmes d'Anchois.

DESSERT.

Café. Liqueurs.

Another and less elaborate bill of fare might consist of:—

Menu for Supper, 8 persons—

Tomato Soup.	
Mayonnaise of Salmon.	Torpedoes.
Cold Beef.	Salad.
Parfait of Chocolate.	Pears in Syrup.
Stuffed Eggs.	

DESSERT.

Coffee.

For an intimate little party of 6 a smaller menu might suffice:—

Menu of Supper for 6 persons—

Ox-tail Soup.	Prawns in Aspic.
Cold Beef.	Baked Potatoes. Salad.
Cherry Tart and Cream.	
Camembert Cheese.	Biscuits. Butter.
Bon-bons.	Coffee.

Wines.—At a supper party the wines usually offered are sherry, champagne, and claret; but when a few friends are invited, sherry and claret suffice.

Such matters as these must naturally be decided by the income of the host and hostess. It would be absurd for a young couple with a small income to give champagne or any other expensive wine, and no sensible person would expect them to do so.

There is no doubt, however, that luncheons, suppers, and afternoon teas are the best entertainments for a young housewife of moderate income to attempt, for these meals are not necessarily expensive, and inexperienced servants are less likely to make blunders when serving them.

GARDEN PARTIES.

Persons with small incomes find garden parties cost far less and give much more pleasure than any other form of entertainment. The best time is from May to the early part of September; afterwards the days are short, the grass is damp, and in the country shooting interferes. A date should not be fixed until the weather—a great factor in all out-of-door entertainments—looks settled. If it rains, only a few people come, and it is difficult to amuse them in a small house.

ENTERTAINING.

Invitations.—To allow for disappointments, a greater number should be invited than are expected to be present, and it is wise to issue invitations a fortnight in advance. A list of the guests should be made, and a mark put against those who accept, so as to ascertain how many to provide for. Notes or cards can be written, the latter with "At Home" printed on being most convenient. A card should be in this form:

[Write here name of guest.]

Mrs Smith,
At Home,

[Date.]

4.30-7.30 p.m.

Ash Grove.

[Lawn-tennis, Croquet, or other amusement
may be mentioned here.]

R.S.V.P.

Fig. 515.

.. SALAH UNG BAHADUR

Time is optional.

Dress.—Ladies who intend playing lawn-tennis should wear suitable dresses; gentlemen, flannels. In London, frock-coats and tall hats are worn.

The maids in attendance on the tea-table should wear neat black dresses, large white muslin aprons, pretty caps, and nice shoes.

Reception.—The hostess receives on the lawn, close to where the guests arrive. She must be well *en évidence*, and remain on the same spot till all have assembled. Strangers should be introduced to friends standing by, the younger being named first, or the one of lower position. At the same time, persons living in the same neighbourhood should not be introduced. Unless there is evidence to the contrary, the presumption is that, if they do not know one another, they do not wish to. The chief or eldest guest is offered tea before the others.

Refreshments.—Tea should be, if possible, out of doors, and should begin about half an hour after the guests arrive. The table (or two tables

placed close together) should be covered with a spotlessly clean cloth, and should have small low vases of flowers—high ones are apt to be upset—placed down the centre. The flowers look best when they are all of one kind; at any rate, the colours should harmonize well. (Several useful hints may be found under "Table Decoration", p. 18.) Two or three little tables dotted about are convenient to rest cups on. The tea and coffee equipage should be at the back, with cups and saucers. The tea must be good, and the water really boiling, a fresh supply being made as required. Boiling milk is essential for coffee, and proper coffee sugar. A brass or copper kettle looks well. The china need not all match; friends can lend some, and it can be hired. The tea and coffee should be poured out and handed round with milk, cream, and sugar on a small tray or salver. Different kinds of cakes and other eatables should be well in front, so that guests can help themselves. It is usual to have sandwiches of potted meat, with a very little mustard and cress, or lettuce. They are also nice if made of cucumber, tomato, or egg. A few good sweetmeats help to decorate the table. Claret cup and lemonade are acceptable to lawn-tennis players, and a table with these drinks should be placed near the court. If ripe strawberries or raspberries are served with cream in a silver or china bowl, sugar may be added to taste. A dish of mixed fruit, such as apricots and plums, with grapes hanging down at the sides, is very pretty, especially if a few vine leaves are arranged with them. Tea should go on practically all the afternoon, as friends who come from a distance may have a cup before leaving.

Amusements.—It is essential that the members of the family should devote themselves exclusively to their guests. If they take part in a game of tennis, it should be only because they are actually wanted to make up a set, and never when there is any one else present who might like to play. In the proper performance of their duty, they will have quite enough to do. If things are to work smoothly, they must be carefully planned and arranged. It must be settled beforehand who are to be partners in the next tennis set, who are to play in the next game of croquet, and, in short, how to keep everybody interested without tedious pauses or discussions.

The usual games are lawn-tennis, croquet, bowls, throwing darts at a target, and putting (which only requires a few holes in the grass). Guests should not be obliged to play at anything unless they wish; many prefer sitting down or strolling about. Should it rain, there is certain to be someone who can sing or play. As billiard-tables can now be fixed on dining-tables, they are often found in small houses. This amuses the male guests.

Accommodation for Guests.—In the country, if stable room is limited, arrangements can be made to put up carriages at a farmhouse; a shed will do for bicycles. Tea and cocoa are enough for the men-servants, and arrangements should be made for their having it without coming into the house. A man must be hired to take charge of such carriages as are not accompanied by servants; guests give him a small tip on leaving.

Leaving.—When the guests leave, it is not absolutely necessary for them to say good-bye to their host and hostess. It is quite sufficient for them to shake hands with a son or a daughter. At the same time, if the host happens to know that they are going, he should, as a matter of courtesy, accompany them to the gate.

In the case of a large and formal garden party, it is usual to leave cards afterwards—within a fortnight; but in ordinary cases this is not necessary.

DANCES.

Dances may be “small”, “tiny”, “early”, “early and late”, “impromptu”, and “surprise”. The two latter imply that dancing is not mentioned on the card. In the country a dance should be fixed, if possible, when there is a moon. Any additional help that may be required—waiters,

[Write here name of guest.]

Mrs. Smith,
Mrs. Jones,

At Home,

at the

Dancing.

9. 30 p.m.

R.L.V.P.

Fig. 516.

cook, and others—must be secured before the invitations are sent out and musicians engaged.

Invitations.—These may be printed or written, and on a card or small sheet of note-paper. If the house is small, it is better to ask people by name. If the house is large, then “Mr. and Mrs. Smith and Party”, which includes

all visitors staying in the house, as well as sons and daughters. The time for arriving only may be named, if preferred. When asking young men to come and stay for a dance, it is a good plan to arrange with friends who also intend giving one that both shall be in the same week. This is a mutual advantage. A separate card is sent to sons, unless "Mr. and Mrs. and Party" are asked. When there is no mother, the invitation is—"Mr. and Miss", or "Miss" only, or "The Misses". The daughter undertakes all the duties of hostess, and acts in every way as the mistress of the house. If it is only a small party, it is not always necessary to ask the father and mother. No chaperons are required; girls come with their brothers.

Sometimes when a dance is given to celebrate a daughter's birthday, the invitations are issued in her name. Only young people are asked, and her mother is supposed to chaperon them all. A very light supper is served, and the party breaks up early.

Occasionally two, three, or more ladies join in giving a dance at a public room. The invitations are then sent out in the names of two or more. They share all expenses, each contributing viands for supper, &c., or dividing the cost of catering per head. Band and other expenses are shared also. They use their own chairs, sofas, curtains, and flowers, and bring maids to attend in the cloak-room. Each lady asks her own friends, and they are not necessarily known to the other hostesses. One or two of the hostesses receive the guests. Cards are left by the guests about a week after the party on the hostess with whom they are acquainted.

Bachelors or spinsters may give an invitation dance. The cards are written or printed as shown in fig. 517.

Preparation of each Room.—The hall, if large enough, can be used as a lounge, or for refreshments or for dancing. In this case the front-door must be kept shut and screened by curtains, and the guests enter by a back or side door. Should this arrangement necessitate passing the kitchen or pantry, doors must be closed, and the passages carpeted. The hall, if used as a lounge, must have rugs on the floor, some easy-chairs, and flowering plants in the fireplace and corners, and generally be made pretty and comfortable. It must be well-lighted. If it is only used for refreshments, a buffet and a few chairs will suffice.

Gentlemen leave their coats and hats in a small room on the ground floor set apart for that purpose. They can also be left in the hall, if it is not otherwise required.

The ladies' cloak-room should, if possible, be on the ground floor, and should have a looking-glass (a long one for choice), brushes, combs, scent, powder, pins, and needles and thread, in case dresses are torn. If a bedroom is used, the toilette-table should be nicely set out, and a good fire lighted if the weather is cold. When there are many guests, small numbered tickets (two of each number) are necessary, one to be given to the guest, the other pinned to her cloak. The maid in attendance should be neatly dressed in black, white cap, collar, cuffs, and apron. A white piqué dress is sometimes worn.

The reception-room may be the drawing-room, or a room adjoining the dancing-room.

The largest room, if possible on the ground-floor, or even the hall, may be used for dancing. Should there be any doubt about the safety of the floor, it should be examined by an expert. If not level it should be planed; or, if a parquet floor, well polished. An ordinary floor is improved by being rubbed with milk, and then with a little French chalk, and a very little

[Write here name of g]

*The Bachelors of the
(Town district or county)
At Home,*

at the

Dancing.

9.30 p.m.

R.L.V.P.

Fig. 517.

bees'-wax. For a small party, brown holland well stretched over the carpet will suffice. The room must be well lighted by gas, lamps, or candles in sconces on the walls—only the best candles, for inferior ones gutter and the wax drops on the floor. The fireplace can be filled with flowering plants, the mantel-piece banked with moss, and flowers (all of one hue) placed in it. A few benches round the walls are often appreciated; if they are common wooden ones, they may be covered with scarlet cloth.

Supper is usually served in the dining-room. If only light refreshments are provided, they are arranged on a buffet, as for tea. They generally consist of sandwiches, lobster salad, jellies, creams, trifles, tipsy cake, biscuits, cakes, and fruit. If a regular supper is given, it is best to have small tables, each laid for four or six guests, with a vase of flowers in the centre, a jug of claret or champagne cup, and some pretty sweatmeats in small china or silver dishes on velvet stands. Pink candles, with pink shades in orna-

mental china candlesticks, look well, unless the room is lighted from the centre. When these little tables are used, all the viands are handed. If a long table is preferred, two of equal height can be placed close together, covered by one cloth. The tables must be a convenient height for the benches or forms (which are better than chairs), and they should be raised or lowered accordingly. There should be plenty of flowers and one or two plants for decoration, the latter in china or brass pots, or silver wine-coolers, and a menu at each corner. A turkey, boned and stuffed, may be at one end, and at the other a game pie, or chickens and a tongue, or ham. The chickens should be neatly carved and tied up with white ribbon. Sweets are placed on the table, and handed when required. Guests go in to supper in relays, the door being temporarily closed while the table is relaid. There must be enough waiters to attend well on the company, and a good supply of cutlery, and spoons and forks. All can be hired, or lent by friends. If the supper cannot be prepared at home, confectioners or the stores will contract to supply everything at so much a head, and will also provide dishes, cutlery, and glass, and send men to arrange the table and fetch all away next day.

If the passages are cold, they must be warmed, especially if large enough to sit in. They need not be brilliantly lighted. There should be lamps in the conservatory, however small; when space permits, chairs should be placed in it. The garden should be illuminated, so that if the evening is warm, guests can promenade there between the dances. There should be a few seats, both garden and basket chairs.

Dress.—The hostess should not be too elaborately dressed. The gentlemen wear evening-dress, white ties, and gloves. If an impromptu dance be started, they cannot all be expected to have brought gloves. It is a good plan to have a pair in the pocket. Ladies always wear gloves; they should be kid or suède, not silk. They keep their gloves on at supper. Sometimes they carry bouquets, but this is not necessary.

Arrival and Reception of Guests.—The host and hostess may stand at the door of the dancing-room to receive their guests. If the drawing-room adjoins the dancing-room, they receive in the former, and they remain there till all the guests have arrived. They shake hands with everyone, whether they have seen them before or not. A lady bringing a party should, on entering, name each person to the hostess. The daughters of the house should not dance at first, but look after their guests. On leaving the cloak-room the guests give their names to the servant, who announces them to his mistress. At a public or subscription dance, they enter unannounced.

Entertainment of Guests.—A card-table may be set out in the drawing-room, or in a room set apart for cards only. Photographs and anything likely to amuse the guests may be left on the tables in the reception-rooms.

Management of the Dancing.—When programmes are not given to the guests, a large card, printed or legibly written with the order of the

dances, should be hung up in the dancing-room, but for a small or impromptu dance nothing of this kind is needed. The musicians are stationed at one end of the room, and, of course, must be provided with seats, music-stands, and plenty of light. While they have supper, a daughter or a guest usually plays a dance. There is no formal opening dance. A waltz is generally played first, and "square" and other dances follow, to the number of eighteen or more. There may be "extras" during supper. "God Save the King" is played at the end. At small parties, a guest or daughter may take it in turn to play all the evening. The intervals between the dances should not be long.

Refreshments.—Tea and coffee should be offered to the guests before they enter the dancing-room. A room not required for anything else is best for the purpose, and in that case ices, lemonade, and claret cup may be added. Mulled wine is acceptable in winter. A table with a nice clean cloth should be placed at one end of the room, a few vases of flowers down the centre, cakes, biscuits, and bread and butter in front, and the tea and coffee equipage at the back. One or two maids stand behind, and pour it out. They should wear black dresses (or white piqué), white aprons, collars, and cuffs. Waiters may wear white gloves, provided by the host. It is dangerous to put candles or lamps near the edge of the table, and lamps should be well and carefully trimmed, and the best oil used, or they flare up and smell disagreeably.

Subscription Dances.—Sometimes subscription dances are got up by two or three ladies. They send round circulars to friends, saying it is proposed to give a dance on such and such a date, and asking them to bring a party. They mention the tickets will be (ladies') 7s. 6d., and (gentlemen's) 10s. 6d. If one hundred and twenty tickets are sold, success is generally assured. The band costs £8 to £10. Friends lend flowers and help to decorate the room, but very little decoration is required. Maids are brought to attend in the cloak-room. The supper may be a buffet, or a sit-down one. To reduce expenses, viands can be bought with the ticket-money and prepared at home. There is no formal reception or taking leave, nor need for cards to be left on anyone afterwards.

Bachelors' and Spinsters' Dances.—Bachelors and spinsters may give an invitation dance. All arrangements for these dances are made by a committee, and each bachelor wears a badge to distinguish him from the guests. The spinsters in the same way wear a small bunch of flowers. Two or three of the committee receive.

Stable Accommodation.—If the stable accommodation is not sufficient, arrangements should be made in the country for putting up carriages at neighbouring farmhouses. In a town, guests settle for themselves. No supper is then given to the coachmen. In the country, bread and cheese, cold meat and beer are usually provided.

Departure of Guests.—Guests take their departure shortly before the time fixed upon the card. If no time is named for leaving, they enquire on their arrival when carriages are to be ordered. If the party is a large one,

someone should be outside to regulate their approach. Each guest takes leave of either host or hostess. Ladies unaccompanied by gentlemen are escorted to the door.

GUESTS STAYING IN THE HOUSE.

In London, and in other towns, invitations for a visit of some duration are not so popular as in the country. In the average town house it is not always possible to arrange a spare bedroom; also, in the hurry of town life, the constant entertaining of a visitor is sometimes a tie, while if the visitor amuses himself and makes his own engagements, the hostess is apt to grumble.

Hints to Hostess and Guest.—As a general rule visits paid to London friends are not for a long period, from two or three days to a week being the general term of stay. The hostess in entertaining a lady friend should realize that her guest will probably have shopping to do and friends to see, and that she will wish to take the opportunity of visiting the theatres and seeing some pictures; while the guest on her side should remember that it is scarcely polite to be out from morning till night, thereby showing plainly that it was for her own convenience, and not for the pleasure of seeing her hostess, that the visit was paid. When the stay is short the hostess should consult her guest as to her plans, and both should endeavour to make mutual arrangements. A guest, if going to the theatre with other friends, should if possible arrange to dine out rather than put her hostess to the possible inconvenience of changing the dinner-hour. She should always be careful to inform her hostess in ample time if she will be out for luncheon or dinner. Other matters, inconsiderable in themselves, but important to the comfort of the household, should be remembered. In a small town house, when the staircase is narrow and there are no men-servants, a weighty dress-box is likely to be troublesome, and when the staff of servants is limited, and much shopping is being done, the guest will be wise to arrange that parcels shall be sent together, and at one time, instead of at all hours of the day. When paying visits in town the guest is expected to convey herself to and from the station, pay the cabman, and tip the man who brings in the luggage, unless indeed he is a servant of the house.

Tips.—After the visit the housemaid should be presented with a *douceur*, and when only women-servants are kept, one is often given to the parlour-maid in addition. If there are men-servants, something would also be offered them, provided that they have rendered any extra service; otherwise ladies are only expected to give gratuities to the women-servants. Men guests, on the other hand, tip the men-servants.

The amount of the tip to be given is a difficult matter to settle. It depends to some extent on the length of the visit, the services which have been rendered, the social position of the guests, and the style of house in which he or she is staying. In a small house, where housemaid and parlour-

maid are kept, after a visit of a few days to a week, 2s. 6d. to each servant would be sufficient. In a large establishment a married lady would probably give the housemaid 5s., and her husband would give the same amount to the footman. An unmarried woman would give the housemaid 5s. Young girls visiting by themselves are not expected to give large tips, unless indeed they are known to be well off, and are accompanied by a maid. Rich people often present large tips, the husband giving a sovereign to the butler and half-a-sovereign to the footman, and the lady half-a-sovereign to the housemaid.

The system of tipping is one which, for many reasons, is to be deplored. The idea that guests should help to pay the wages of their host's servants is objectionable. Tipping of hotel servants is a different matter, but in private houses high wages are generally paid, and the servants are engaged to wait upon visitors as part of their ordinary work. The practice of tipping, however, is so universal that those people who pay visits must conform to it.

Shooting Parties.—In the country, visits are a recognized form of entertainment during the country-house season, which begins in September for partridge-shooting, and continues throughout the winter for pheasant-shooting, hunting, and balls. Visits such as these do not last for more than four days; the guests arriving about tea-time on Monday, for instance, and leaving on Thursday morning.

Week-end Visits.—Saturday-to-Monday visits are popular in country places which are near London or other large towns. In these cases it is not necessary to provide any special entertainment.

Informal Visiting.—People who live in small houses, and have no shooting to offer, entertain their friends in a simpler manner, giving invitations of a week, ten days, or a fortnight to more or less intimate friends, who are expected to take life as they find it.

Invitations.—Invitations for visits are given by means of letters, and it is usual to state the length of the visit. For example, the hostess writes:—

Dear Mrs. L.,

We shall be so pleased if you and your husband can come to us from the 10th to the 14th of January. My husband hopes to shoot on Tuesday and Wednesday, and the County Ball takes place on Wednesday night. The best train in the day is the 2.45 at Euston, arriving at Towerbridge at 4.56. The carriage shall be there to meet you. We much hope that you will be able to come to us.

Believe me, Yours very sincerely, &c.

If it is impossible to send a carriage, the last part of the letter might run as follows:—

I am sorry that we cannot send the carriage to meet you, but you will find a cab waiting.

Time of Arrival and Departure.—When paying country visits the time of arrival and departure must be arranged carefully and adhered to, otherwise it may cause the host much inconvenience. Unless there is some reason to the contrary, guests are generally expected to arrive after four and before seven o'clock. If the hostess does not mention a suitable train, the guest, when accepting the invitation, should suggest one.

Meeting Guests.—In the country, when the host lives at some distance from the station, and possesses a carriage, he generally arranges to meet his guests. If this cannot be done, he should at least see that a conveyance of some kind is at the station. At some country-houses it is the custom for the host to pay for the cab which conveys guests to and from his house; in others the guest is expected to defray the cost of his own vehicle. It is unnecessary to say that the host who adopts the former course is the more popular. Unless the guest is well acquainted with the ways of the household, and knows that he will not be allowed to pay for his cab, he must of course do so.

Etiquette of Shooting or Ball Parties.—When a three or four days' party is given, breakfast generally takes place from nine to ten o'clock, and nowadays, except in old-fashioned houses, extreme punctuality is not expected. Luncheon is served at one or half-past, tea at four to five, and dinner at about eight. Early tea is always sent up to the guests when they are called at eight o'clock, and soda-water, whisky or brandy and soda, lemonade or lemon-squash is placed in the hall just before the ladies go upstairs to bed. When the men of the party hunt or shoot, hot baths should be provided on their return, and a somewhat more substantial tea than would otherwise be given. When there is shooting or hunting, the men are well employed. The ladies read, write, walk, ride, or drive in the morning, and amuse themselves in much the same way in the afternoon, unless the hostess is able to offer them any special entertainment in the shape of a drive to some place of interest, a visit to mutual friends, or to some bazaar or similar function which it is necessary to patronize.

Management of Guest-chambers.—In a large house, the housekeeper is, of course, responsible for the arrangement of the guest-chambers; in a smaller establishment the hostess must attend to the matter herself. She must assure herself that the beds are thoroughly aired, that there are sufficient blankets, and that matches, candles, and soap are provided. A vase of flowers should be arranged on each dressing-table, and a supply of notepaper on another table, with telegram forms. The servants should be instructed to answer bedroom bells immediately, and to be careful that the wants of the guests are at once attended to.

Duties of Servants.—When guests are unaccompanied by maids or valets, the housemaids are told off to wait on the ladies, the footmen on the gentlemen. In a house of medium size the housemaid, on the arrival of the guest, should fetch hot water, and see that the luggage is brought up immediately and unstrapped. If the guest is without a maid, the housemaid must ask for the keys, unpack, ascertain what dress is to be worn,

and put all articles required for the dinner toilette in readiness. In winter the fire should have been lit early in the afternoon. Before the dressing-gong sounds, the housemaid must take up hot water, attend to the fire, and return a little later in case she is required to lace a dress or otherwise help the guest. When the latter has left her room, the housemaid should take down the boots and skirts which require brushing, and make the room tidy. Before bed-time hot water should be taken to the room, the fire made up, night-dress, dressing-gown, and slippers put ready.

Next morning at eight o'clock the dress and boots, hot water, and tea should be taken up, the bath prepared, and the room tidied. If the fire is to be lighted, the grate should be cleaned before the guest is called. After breakfast the ordinary housemaid's work is proceeded with, and hot water is taken to the room before luncheon, and before early tea. If the fire is not kept up throughout the day, it should, if possible, be lighted at three o'clock. When the time arrives for the guest to leave, the housemaid should pack up, being careful to see that no articles are left forgotten either in drawers or cupboards. In a small house where there are perhaps only two servants, the guest cannot receive so much attention. She must expect to pack and unpack for herself, and should in every way endeavour to give as little trouble as possible.

LOCOMOTION.

RIDING AND DRIVING.

Horse and Carriage.—A young couple who intend having a horse and carriage will find their path beset with difficulties at the outset unless they have an experienced friend to advise them what to do, and more especially what not to do. One question they will have to decide is, "What do we want?" or more correctly, "For what purpose do we require a horse and carriage?" This is the first thing a carriage-maker will ask them when they go to purchase. Is it for country use? If so it must be of a heavier build than if intended for town use, unless the roads of their district are exceptionally good. Will the carriage have light or heavy wear? What is the character of the roads over which it has to travel? These are questions that a conscientious dealer will ask his customers, in order to advise them and to supply them with the most suitable vehicle.

What should a young couple choose? If they live in the suburbs and want a carriage for general use—one to take them out to dinner at a friend's and back, or to run them up to a theatre, and also take them for an easy drive now and again—they have the choice between a victoria and a brougham. A landau is useful, as it can be either closed or open, but it requires a pair, whereas the brougham or victoria needs but a single horse. A good landau may cost anything between 150 and 200 guineas, and a pair of horses may cost as much, so that the bare initial outlay may amount to £400. The cost of upkeep, *i.e.* shoeing, forage, and coachman, will entail an annual expenditure of £150. If a stable and coach-house have to be hired, the rental forms an additional sum, and beyond this there is wear and tear, besides incidental expenses of a minor kind. A landau, too, is a quick-wearing vehicle.

A brougham, on the contrary, is one of the few vehicles that look at all nice with only one horse. It is cheaper to buy in the first instance than a landau, for a very good one can be got for £100 or £120, and many first-class firms will sell a "hundred-and-twenty-pound brougham" for three annual instalments of £42 or £45, a method of payment more frequently adopted than that of paying cash down.

For all-round work there is nothing better than a brougham, and for town use a brougham is indispensable. It possesses the advantage of being easily cleaned, there are no hinges or leather-work to get out of order, and as a rule it has great ease of traction.

Purchase of a Horse.—A more difficult task is the purchase of a horse. The most satisfactory way to get a good horse is to go to a well-known dealer, a man who has a reputation to lose, and tell him frankly what is wanted. At the same time no bargain should be concluded without an examination by a veterinary surgeon, whose fee may be 10s. 6d. or £1, 1s. Get the dealer to give a "warranty" of soundness with the horse, and all

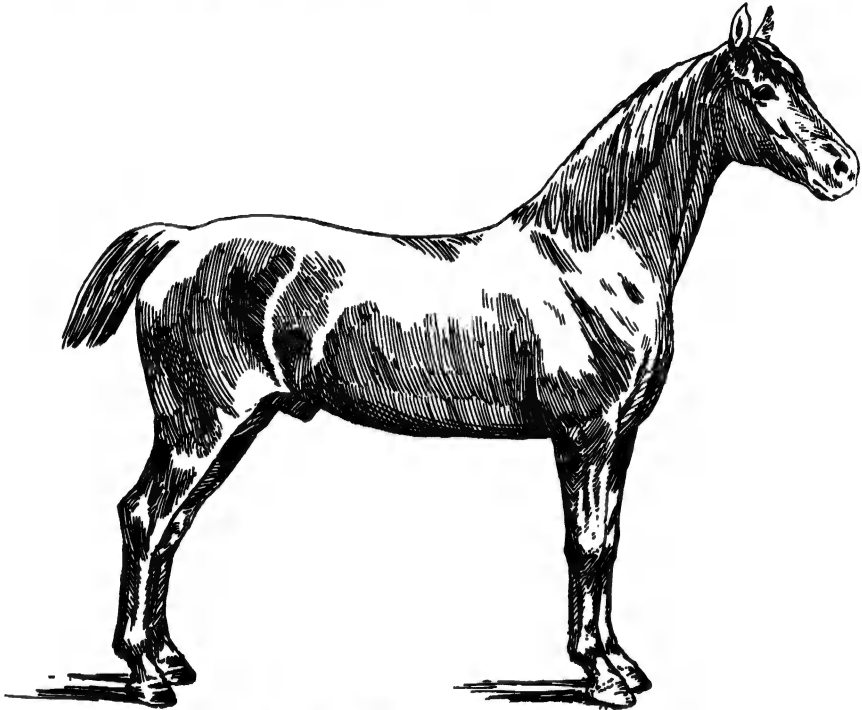


Fig. 512.—Horse: to illustrate Good Points.

- | | |
|---|--|
| 1. Well-formed and intelligent head. | 7. Hind-quarter cleanly out. |
| 2. Well-arched and shapely neck. | 8. Hind limbs nicely vertical—well "pillared". |
| 3. Withers well balanced. | 9. The belly of good form. |
| 4. Back well shaped. | 10. Fore limbs well planted. |
| 5. Loins and croup well placed. | 11. Chest well proportioned. |
| 6. Tail nicely hung, showing trace of Arab blood. | |

will have been done to ensure a satisfactory purchase. A good brougham horse of sixteen hands can be bought for £40. A good "stepper", one that lifts the fore-legs well, will cost over £80. A respectable dealer will sometimes change a horse bought from him on a warranty, even when the change is a matter of pure caprice.

A warranty, it may here be explained, may be general or special, or for a length of time determined on by the vendor and purchaser. A "general" warranty explains itself. A "special" one warrants some particular part; for instance, the seller may warrant the horse in his feet. A "time" warranty protects the purchaser for a predetermined period, a month being the usual limit. A very good form of warranty is as follows:—

"Received from John Henry Wells the sum of £80 (eighty pounds) for a bay mare, warranted sound, quiet in harness or to drive, seven years old, and free from vice".

When the animal does not answer to its warranty, the purchaser can enter an action for damages and expenses incurred in keeping the horse until it is disposed of.

There is no need to choose a young horse for harness work; eight-year-olds are as good as one can wish, for by that age they are well up to their work, and have settled down out of the friskiness of youth. The young horse, too, is more expensive.

Pony and Cart.—A pony and cart is very suitable for a young couple whose income will not support the "keeping up" of a horse and carriage. It is possible to obtain a pony and cart together for £20, but as good cattle cost no more to keep properly than common ones, it is advisable to have a turn-out that looks well. A nice little cart of the Marlborough or Ralli type can be purchased at any London carriage dealer's for 30 guineas, and for another 5 guineas rubber-tyres to the wheels can be obtained in place of the metal ones.

The advice given in reference to the purchase of a horse applies to the purchase of a pony. As the mistress may like to take the pony out by herself, it should be warranted "quiet to drive". It is not always convenient to be accompanied by a coachman, and it is very unpleasant to have a restive animal to drive, one that must be held and watched with the utmost vigilance.

The cost of keeping up a small pony and cart would come to about 15s. a week in town, and much less in the country, or in a place where the pony could be turned out now and again. This is, of course, exclusive of the wages of a coachman or odd man to look after the pony and cart. The above estimate is for a small pony of fourteen or fifteen hands. The entire cost in the first instance would, roughly, be £60; the pony would cost £25, or even less, the Ralli cart £30, and harness £7. The stable expenses come to very much less than those of a brougham and a horse; and in the country, especially when one's house is at any distance from town or station, a pony cart is often useful. If it costs too much to have a man expressly to look after it, the master can easily manage it himself, and generally much better than any "odd man" would.

One of the advantages of looking after a pony oneself is that neither master nor beast can suffer from what is, unfortunately, a very common piece of dishonesty, viz. charging the master with the price of food which the pony never even sees. Cornchandlers could tell a tale on this head of half-starved animals whose owners pay, all the same, a high weekly bill for fodder. The difference goes into the coachman's pocket.

Rubber Tyres.—If the trap, brougham, or other vehicle is intended for town use on wood-block paving or asphalt, rubber-tyres are preferable;

they are noiseless in motion, they lighten the draught for the horse to pull, and they lessen the vibration, thus decreasing the wear and so lengthening the life of the vehicle. On the other hand, if they are used on country or

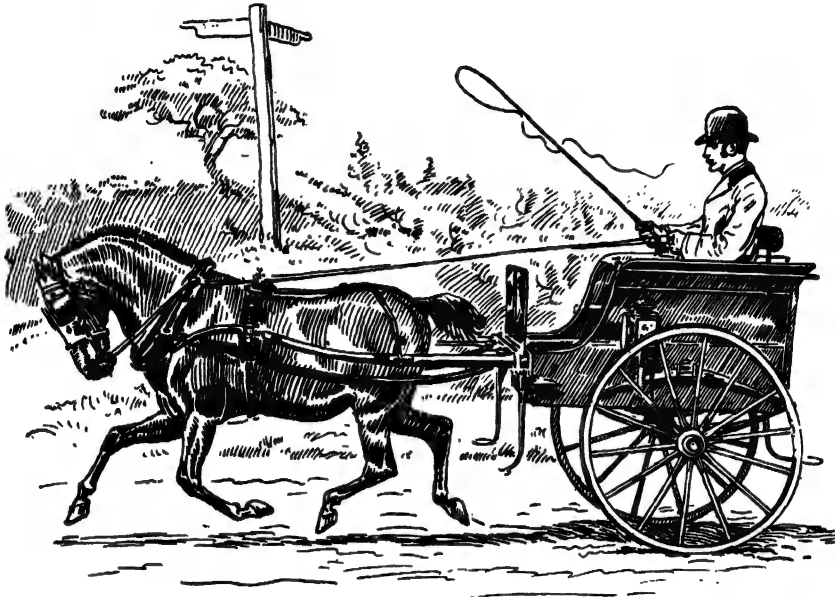


Fig. 519.—Ralli Cart.

loose roads, or even on setts, they wear out very quickly, as the sharp edges of the loose stones gash the outer surface of the rubber badly.

Treatment and Care of Horses.—The management of a horse is a matter with which every person who owns a carriage should make himself familiar. It is bad policy to leave too much to the coachman or groom, as unless he is a good man who takes a pride in his charge, the horse is apt to suffer from neglect.

The first duty in the morning is to water the horse. This should never be done after a meal, or indigestion, and perhaps even inflammation, will result. After a few minutes a good breakfast of $\frac{3}{4}$ gallon oats and 1 lb. chaff should be turned into the manger, and the water-bucket emptied and refilled, so that the horse may alternately eat and drink. When the meal is finished the water should be taken away, and not left to absorb noxious fumes, and thus become unpleasant if not dangerous. If the horse seems hot, let the water stand half an hour under cover. This is especially important during the winter months, and on cold days at other seasons of the year. Just a little warm water may be poured into a bucketful to take the chill off, but the horse will probably refuse the drink if the water is appreciably warm.

After a little rest the animal must be thoroughly groomed. The first thing is to go over him well with a wisp of hay just dipped in cold water

and shaken out, so that it is no more than damp; then a stiff bristle brush should be used; the feet should be washed well, and all dirt or stones removed from the hoof. When this is done, all the head should be washed over with a small sponge; it is necessary to be especially careful about the eyes and nostrils. The process is concluded by drying well and going over briskly and thoroughly with the brush once more, this time doing the mane and tail. On days when the horse will not be used until late, if at all, he should have an hour's exercise after he has been groomed. Where a stable-boy is kept as well as a groom-coachman, it will be his duty to remove the damp bedding, sort out that part of it which can be used again, and get it dried during the time that the horse is out for exercise. On returning to the stable, the horse should have a final brush down. He cannot be groomed too much; the more this is done the better he will look, and the more fit he will be for his work. After work of any kind, such as an afternoon call on the owner's friends, or even after a night trip to the theatre and back, the grooming must be done once more. Many men will neglect this when the hour is late, but the master should see that it is properly carried out.

The usual bedding for horses is straw, but sawdust is much to be preferred. When freshly laid it has a much cleaner appearance, and does not heat the feet as the straw does. Many horses eat their bed, and unfortunately once the habit has been acquired it is a lasting one, as long as straw is used, but no horse will eat sawdust.

Ill-treatment often causes and always aggravates viciousness, for which reason any impatience in a groom should be rebuked at once. Some horses are so thin-skinned that a bristle causes real pain to them, and the result is that they flinch and kick. In such cases the groom not infrequently ties the horse up tighter, and at every flinch it gives beats it with the brush, and if it kicks, ill-treats it still further, until after a week or two it has become confirmedly vicious at grooming-time. Unfortunately, although the cause can be guessed, the mischief is not easily prevented, for a man is not likely to show impatience if he suspects that he is being watched. The only thing that can be done is to discharge the groom, and tell his successor what to expect of the horse, pointing out that uniform kindness may cure him.

Should a horse develop the bad habit known as crib-biting, remove all the utensils and saw off all projections in the stable, leaving it bare of fittings. The fodder must be thrown on the floor. A crib-biter can never be kept in proper condition.

Shoeing is a matter requiring careful attention. Worn shoes are dangerous; no horse should be driven with them, for they are one of the most frequent causes of accidents.

When a horse falls ill, a properly-qualified veterinary surgeon should at once be sent for. Above all, the groom should not be allowed to "dose" the animal, since he is not unlikely to give an unsuitable medicine which may delay recovery. Of course, a mere trifling ailment is a different thing;

in that case a ball or a powder, administered in time, will often save a heavy bill. Nearly every chemist, for about a shilling, will be able to mix up a ball or a powder for a slight indisposition if the symptoms are properly described.

A hungry horse must not have his first feed on chaff alone; a few handfuls of hay pulled from the truss should be given first. A horse when hungry bolts his food, and chaff thus taken is apt to bring on colic.

Beans ought to be of the previous year's growth, and should weigh at least sixty-two pounds to the bushel. The inside should fill the shell well and taste sweet.

Bran is one of the finest things to have in a stable, being a laxative if well-damped; it keeps the animals in good condition. To have an astringent effect it must be given dry. It spoils if kept too long. Good bran is sweet-smelling and cool to the hand; musty bran should not be purchased. Meadow-hay makes the best chaff, but green oat-straw may be used at a pinch. It should be well cut, and is more nutritive when mixed with green food or mangels.

Carrots and parsnips are splendid food, especially for convalescent horses, restoring them to good condition very quickly. Sliced up with a few oats and some beans they form a rich meal. It is cheapest to purchase them in the autumn, in sufficient quantity to last over the winter and early spring months.

Green stuff is very good spring food if given fresh, otherwise horses are better without it. Clean lawn-clippings, mixed with hay or oats, may be given occasionally. The best of all green foods is lucerne, but vetches are commonly used.

Hay for horses should be hard and crackling. Soft hay is of no use except for milch cows. Eighteen hundredweight to the load is about the right weight for old, well-dried hay, and anything lighter ought not to be purchased.

Linseed is useful for mashes.

Maize, being cheaper than good oats, is often used as a substitute, especially in livery stables. It should not be given unless the animals are regularly working in harness.

Mangel-wurzel is good in summer, but requires to be well pulped and then mixed with chaff.

Mashes are very useful and necessary at times; the two kinds in general use are bran mash and bran-and-linseed mash. To make a bran mash rinse out well a wooden bucket with boiling water; put in three pounds and a half of bran and a piece of salt the size of a walnut, pour on this three pints of boiling water; stir it for a couple of minutes, cover it, and let it stand nearly half an hour. A bran-and-linseed mash takes longer to prepare. Boil a pound of linseed in three quarts of water until there are only about two quarts of liquid. This will take nearly three hours. Add two pounds of bran and a small handful of salt, and stir round and cover up as directed in the first recipe. Sometimes a horse refuses a mash for no

apparent reason. In such a case boil up a quartern of oats and add it to the mash. The aroma of the oats often entices the horse to eat when other means fail.

Oats should weigh at least forty lbs. to the bushel. The skin ought to be smooth and thin. The flavour should be sweet, and the oats themselves should look plump. It is an economy to get the best quality when purchasing.

Oil-cake is useful to horses when they are changing their coats. The inferior qualities should be avoided.

Potatoes and other roots are best given in hay-chaff.

Rye-grass is useful at times when heavy work is being done.

Salt is, as a general rule, much liked by horses. A large lump of rock-salt may be put in the manger.

Sugar is wholesome when the animals are in poor condition, as it helps to fatten them up.

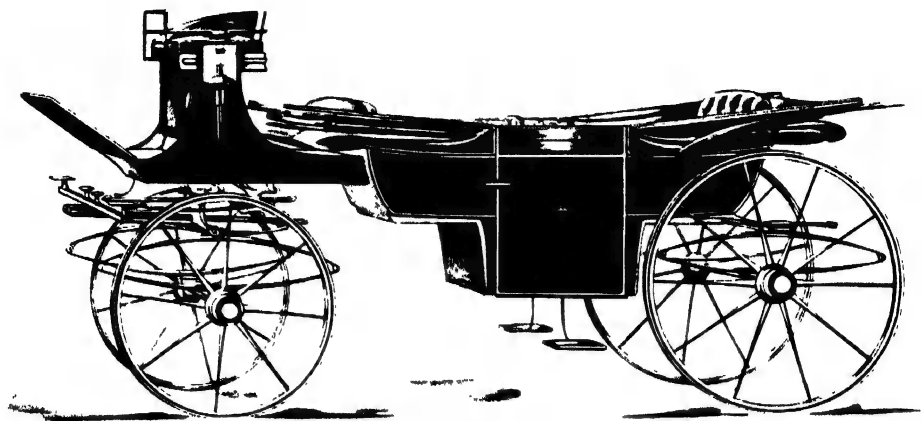
Care of Carriage.—The carriage should never, in any circumstances, be cleaned inside the house, for this causes dampness, and when the place is shut up and gets warm the moisture settles on the carriage and takes the "bloom" off the varnish. A linen cover should always be bought or made to fit over the brougham to protect it from dust and damp, both of which destroy the varnish. A carriage should never be put away dirty, and should never be cleaned in the sun. Plenty of water and a large, soft sponge should be used. A syringe, with very small perforations to make a fine spray, is also useful in a coach-house. Should the varnish or enamel be stained, a mixture in equal portions of linseed-oil, hot vinegar, and turpentine will be found an excellent preparation, not only to remove the stains, but to preserve the woodwork of the carriage. It occasionally happens, especially when the carriage is used during wet weather, that the steps get rusty. To remedy this they should be brushed over from time to time with some of the prepared Brunswick black, which is sold very cheaply in tins.

To keep off moths, the doors and windows should always be closed when putting the carriage away. If they should succeed in getting in, the only thing to do is to fumigate the interior of the carriage with a mixture of camphor and turpentine.

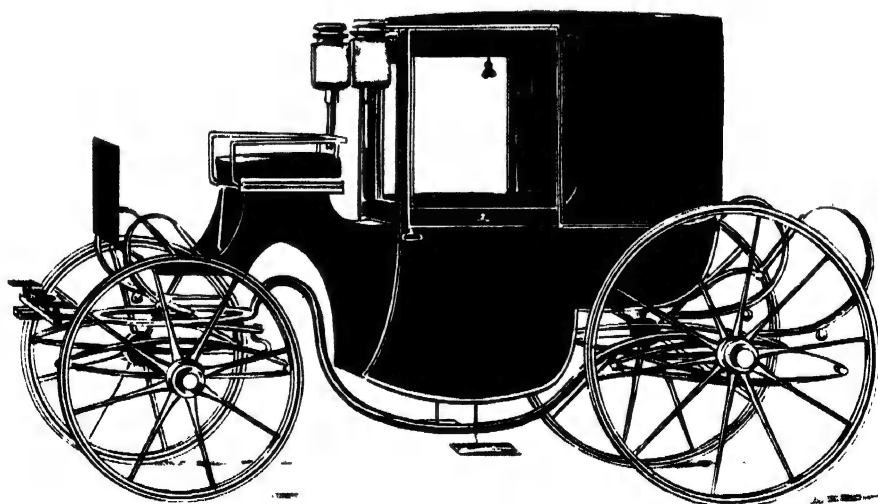
The points of friction, such as the bearings of the axles and the slides of the fore-carriage, should always be kept well greased.

Harness.—When buying harness, get the best. It takes up no more room than harness of inferior quality, and certainly lasts longer, in addition to looking better. Good harness, which is invariably hand-sewn, can be trusted at a critical moment, whereas the ordinary sorts are put together by a machine, and the stitches may give way when one's safety depends upon them.

Unnecessary brass and plating are in bad form, and also take a great deal of valuable time to keep clean and in good order. Whiting is the best thing for cleaning metal, which should afterwards be well polished



SQUARE LANDAU, as supplied to H.M. the King and H.R.H. the Prince of Wales



C-SPRING BROUGHAM, as supplied to H.M. the King for his personal use

TYPICAL PRIVATE CARRIAGES

(BY H. GIER & CO., LTD.)

with a soft, dry chamois-leather. When the coachman takes the harness off the horse after coming in from a drive, he should thoroughly dry with a cloth such parts as may have become damp through contact with the horse's skin—the inside of the collar-roll, the under part of the saddle, and the harness-pad. If these are neglected, the sweat becomes encrusted on them, and so causes soreness in back and shoulders. Unless the horse be relieved from work for some time, such wounds are very difficult to heal, owing to the constant chafing from the harness.

Every month the leather should be well rubbed over with an oiled rag to keep it supple and in good condition. Periodical inspections are to be commended, as small flaws are thus discovered which, if neglected, might result in an accident. Every year, at a time when the carriage will not be in use for a week or two, the whole set of harness should be sent off to the makers to be thoroughly overhauled. By this means it is always kept in good condition, and lasts much longer than if neglected and allowed to fall into disrepair.

The Stable.—If possible a south-westerly situation should be chosen for the stable, so that its occupant may not take chills through being exposed to northerly or easterly winds. All the windows should be made to open by a couple of hinges at the bottom of the frame, so that the fresh air on entering the stable strikes upward. There should be one window at least over the manger and two at the side, to enable the horse to see what he is eating, and the groom to clean him properly.

The best of all the kinds of flooring is roughened asphalt. It is best to employ a good asphalt-paving firm, as inexperienced people are apt to lay it wrongly. If, on enquiry, this seems too expensive, a channelled brick floor may be used. The channels should be well incised into the material of each brick, as they are intended not merely for drainage, but also to prevent the horse from slipping. The building is usually made of the best stock bricks, and the part which actually forms the stable is, or should be, lined with well-glazed bricks, which harbour no dirt of any kind. A swill from a bucket of water and a rub over with a cloth is all that is necessary to keep them clean.

The drainage is a matter of the utmost importance. Above all, there should be no open untrapped drains in connection with a sewer in or near a stable. Persons living in suburban districts should be particularly warned against this. The surface or other drains should be flushed down with two or three buckets of water every day, and in hot weather a little disinfectant powder should be added in order to cleanse them thoroughly.

The partitions between the horses, if more than one are kept, may be of wood, brick, or iron. Iron is not to be recommended, as it has a tendency to cause capped hocks. Good seasoned oak, over two inches in thickness, is preferable to either brick or iron.

The manger must be kept clean, and therefore wood is as good as anything, for a groom can easily get a bucket of hot water and give it a scrub

out now and again. It should extend from one side of the stall to the other.

If there is room a box is much better than a stall, for it enables a horse to get a little exercise. This is especially necessary when the occupant is only taken out a few days a week. The box ought to be large, say thirteen feet square, so that the horse may be able to turn round comfortably without running his nose or tail against the sides. In this case the manger cannot conveniently extend from side to side, and one of a triangular shape is most common. It may be of either wood or iron, situated in the left-hand corner, with a hay-rack above it just high enough for the horse to reach without stretching his neck. The water-bucket may be placed in the opposite corner at the same height as the manger. A flat triangular sheet of iron with a circular hole cut out to receive the bucket is the most simple and most useful support.

The Loft.—The loft is in most places situated over the stable and coach-house, communicating with them by means of a ladder and trap-door. Two or three windows are necessary to give plenty of light. The loft should be a store-room for fodder and bedding; nothing else should be kept there. The best bins are made of galvanized iron; they can be obtained in all sizes, and are secure against the attacks of rats and mice.

A small wooden fence, two feet high, placed at a convenient distance from one end of the loft and extending from one side to the other, is extremely useful to stack hay and straw; the bars effectually prevent the loose wisps and stalks from littering about the floor. Close to this fence should stand the chaff-cutting machine. The edges of the knives need careful attention, for chaff should always be well cut if it is to be masticated easily.

The principal fodders for which accommodation must be provided are beans, bran, chaff, carrots, green food, hay, linseed, maize, mangel-wurzel, oats, oil-cake, potatoes, roots, rye-grass, salt, and sugar.

Rats and mice are often a trouble. If the fodder is kept in bins the difficulty is lessened, but not entirely obviated. The only thing that is really efficacious is poison, which should be spread on bread-and-butter, and placed near the holes.

The Coach-house.—In modern suburban houses the stable and coach-house form one building. This is a bad arrangement, as the ammoniac fumes from the stable spoil the varnish of a carriage. In such a case it is not likely that the makers will revarnish a carriage free of charge, even under a warranty, as a successful plea of contributory negligence—the carriage not having been housed in a proper place—could be set up. In every case the coach-house should be divided from the stable by a brick wall or a “double” wooden partition. The latter is made by placing from the ground to the ceiling 4-inch quartering, 4 feet apart, lining this on both sides with $\frac{5}{8}$ -inch match-boarding, and packing tightly the space between with pine saw-dust. The wood may be varnished on the coach-house side, and either left plain or whitewashed on the stable side. Such a partition

is even better than one of brick, for no fumes can pass through it from the stable, and the saw-dust filling keeps the coach-house warm and of an even temperature.

The best of all floorings for the coach-house is the "wood-block". It retains the warmth, wears better, and lasts longer than concrete or ordinary wood flooring, and does not make so much noise when the carriage is run

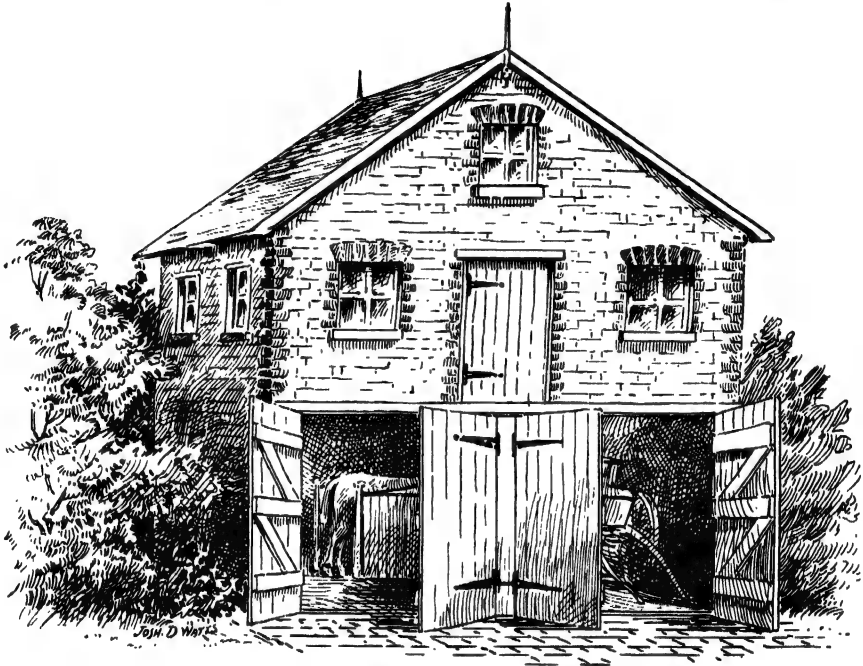


Fig. 520.—Stable and Coach-house.

in and out. It is easily cleaned, and looks much better than any other kind of floor.

If possible, a projecting roof should be fixed over and beyond the doors of the house. This will be found extremely useful during unseasonable weather as a shelter in cleaning the brougham or trap.

Harness-room.—As want of space often prevents a separate room being devoted to the harness, the coach-house is used for that purpose as well. There is no objection to this, unless more than one carriage is kept. A few hooks and wooden supports can easily be driven through the inner wood-work to form a strong attachment, and the harness or the various parts can be put on them.

Coachman.—Perhaps the most trying matter is the selection from a number of applicants of a suitable man for the position of coachman, or groom and gardener. Those whose incomes are limited will find it best to engage a man fitted for both situations. It sometimes answers well to have a married man, so that his wife may assist the mistress and the other

servants in the house. Generally speaking, better work is done by married than by single men, as they are more steady.

Where the coachman's position is a separate one, it is a common custom for him to order the fodder and other necessities, and pay the accounts. The reason is that he may have a chance of adding to his income by commission. This is a matter that should be settled between master and man at the time of engagement. No servant should be allowed to receive any commission; the system is not only bad in itself, but is a strong inducement to fraud. It is far better for both parties not to let the coachman order anything on his own responsibility; he should be given to understand that he must consider his master's property, and not his own pocket.

CYCLING.

Choice of the Bicycle.—Give the utmost that you can afford for a new bicycle, but not, under any circumstances, more than £20. New machines are offered to-day at £6, and even less. Such a bicycle may be good value for the money, and the frame may stand hard work, but the low price is obtained in the main by inferior fittings, such as chain, tyres, saddle, and pedals, which will soon give evidence of their low "caste". A thoroughly serviceable mount, with one speed only, is now offered by most of the best firms for 8 guineas. For better finished and equipped, and equally strong machines, with but one gear, the price is 10 or 12 guineas. For 14 or 15 guineas, the cyclist can have all that he need have in the way of quality and equipment. Beyond that price it is usually a question of proprietary patents or the individual customer's whim.

There are at least a dozen firms whose names, as manufacturers of bicycles, are known and honoured wherever English is spoken. It is best, generally speaking, to buy from one of these, as the name is a guarantee in itself. Many of them now give an actual guarantee "against defects of manufacture" without any limit of time, "to be", as one maker says, "in force for ever". As regards tyres, chains, saddles, variable gears, and coaster hubs, the maker of the bicycle offers only the guarantee of the makers of those items, usually twelve months. The prospective purchaser of a bicycle usually consults an agent or dealer. He should remember, however, that no agent ever represents *all* the best makers, though he may think he does; and his advice and opinion, therefore, should not be taken as quite impartial and infallible. The advice should be sought, wherever possible, of some cyclist with a long and hard experience of touring who has no interest in the trade.

Cyclists who are exceptionally tall, short, heavy, or light, will generally find it of advantage to give their orders to a local bicycle mechanic of good repute. The latter will order the frame to be built and enamelled, and he will himself build the wheels and put the machine together.

While frames of different heights are universally supplied for riders of varying length of leg, the very unintelligent mistake is usually made of supplying all with the same length of crank, usually 7 inches. Crank length should be in proportion to leg length. No one, lady or gentleman, should ride with shorter cranks than $6\frac{1}{2}$ inches. This measurement is made "between centres", *i.e.* from the centre of the pedal axle to the centre of the

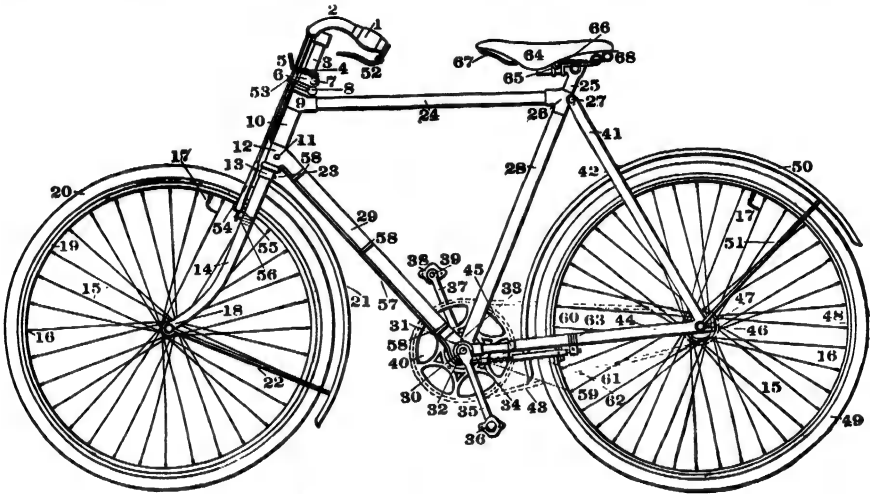


Fig. 521.—The Parts of a Bicycle.

- | | | | |
|---------------------------------|----------------------------------|---|---|
| 1. Handle-grips. | 19. Front rim. | 37. Right crank. | 54. Front brake stirrup. |
| 2. Handle-bar. | 20. Front tyre. | 38. Right pedal. | 55. Front brake block. |
| 3. Handle-bar stem. | 21. Front mudguard. | 39. Right pedal spindle. | 56. Front brake fork clip. |
| 4. Head lock nut. | 22. Front mudguard stay. | 40. Front chain wheel. | 57. Back brake cable. |
| 5. Lamp bracket. | 23. Front mudguard clip. | 41. Seat stay. | 58. Back brake cable clips. |
| 6. Head clip clamp. | 24. Top tube. | 42. Seat stay bridge. | 59. Back brake cable adjuster. |
| 7. Head clip bolt and nut. | 25. Saddle pillar. | 43. Chain. | 60. Back brake compression spring. |
| 8. Steering lock. | 26. Seat lug. | 44. Chain stay. | 61. Back brake stirrup. |
| 9. Top head lug. | 27. Seat lug bolt and nut. | 45. Chain stay bridge. | 62. Back brake block. |
| 10. Head tube. | 28. Seat tube. | 46. Chain stay end. | 63. Back brake stay clip. |
| 11. Head oil-hole cover. | 29. Bottom tube. | 47. Chain adjusting bolt and nut. | 64. Saddle. |
| 12. Bottom head lug. | 30. Bottom bracket axle. | 48. Back rim. | 65. Saddle clip. |
| 13. Fork crown. | 31. Bottom bracket cup. | 49. Back tyre. | 66. Saddle clip nut. |
| 14. Fork side. | 32. Bottom bracket locking bolt. | 50. Back mudguard. | 67. Saddle adjusting screw (for tension). |
| 15. Spokes. | 33. Bottom bracket lubricator. | 51. Back mudguard stay. | 68. Saddle back plate. |
| 16. Spoke nipples. | 34. Crank cotter and nut. | 52. Brake lever (inverted). | |
| 17. Valves. | 35. Left crank. | 53. Front brake adjusting bolt and nut. | |
| 18. Front hub spindle and nuts. | 36. Left pedal. | | |

crank axle. The gearing should be in proportion to the length of crank. The lever with which the work is done is increased in direct ratio to the amount of work to be done. The energy required to drive a bicycle at a given speed is exactly the same whether the cranks and gear are 7 inches by 70 inches, or 8 by 80, or 9 by 90. But the slow rate of pedalling which the higher gear gives means a great increase of pleasure, and fast pedalling is in itself a waste of energy when continued over long distances. It is highly important that the cyclist should not order cranks longer than his length of leg justifies. Length of leg is measured from the fork between them to the ground, the boot or shoe being included. If that measurement is not more than 31 inches, the cyclist must not order longer than 7-inch

cranks, with a 24-inch frame. (Bicycle frames are measured from the centre of the crank axle to the top of the frame at the point where the saddle pillar projects.) With $31\frac{1}{2}$ -inch leg lengths, the frame and cranks should be 24-inch by $7\frac{1}{2}$ -inch. With 32 inches of leg length, 24 by 8; with 33, then 24 by $8\frac{1}{2}$ will be found best; with 34, 25 by 9; with 35, 26 by 9, and so on. Every man of 5 feet 10 inches and upwards in height will be found to have the requisite leg length for 9-inch cranks. Men of corpulent habit of body, who require deep and springy saddles, should take a size less in cranks than that to which their leg length would otherwise entitle them, if it is not more than 34 inches. If it is more, an inch shorter frame should be ordered. It is difficult for ladies to get machines built with cranks longer than 7 inches, but it has been done by the Enfield and Raleigh firms.

A word of urgent warning is necessary in respect of those bicycles made by firms who have no show-rooms and appoint no agents, approaching the public through the post only, by means of specious and misleading circulars. Auction sales, also, of glittering but nameless bicycles, are usually attempts to get rid of dangerous rubbish made only for such sales.

The Weight Question.—The weight of a bicycle has very little to do with its frame. The difference may be only a few ounces between the frames of the racer and the roadster. Between a light bicycle and a heavy one the difference is almost entirely a matter of equipment or fittings. The lightest frame made for use on the road, if fitted with roadster tyres, oil-bath gear-case, 3-speed hub, rubber pedals, and substantial lamp, bell, and wallet, is at once made into a heavy roadster—far too heavy for any but the strong, heavy, and leisurely tourist.

Riders of 10-stone weight or less have no need to order full roadster tyres unless they are intended for daily use, or on such loose and flinty roads as those of Suffolk and Dorset. They will find increased ease and speed by using such tyres as the $1\frac{3}{8}$ -inch open-sided Dunlop, or the Clincher or Moseley Featherweight. Even if they wear out sooner than a heavy tyre, the extra cost is worth while to them, especially as such covers can be bought at 6s. to 10s. each. Such tyres should always be kept sufficiently inflated.

Riders whose length of leg is only 27, 28, or 29 inches (see p. 55) should order 26-inch wheels instead of 28-inch; a further saving of weight being thereby effected. The light-weight rider can usually find quite sufficient comfort in the so-called "road-racing" saddle, which may be taken to mean one under 2 lbs. in weight and about 2 inches high.

The metal oil-bath gear-case, which excludes water and dust, and keeps the chain and driving bearings running in oil, probably stands for perfect lubrication and the limit beyond which friction cannot be reduced by lubrication. But it adds 3 lbs. to the dead weight of a bicycle, and it offers a considerable area of resistance to a cross wind. For regular use in wet weather, or on roads normally loose and flinty, it is almost indispensable; but where light weight is desired, and yet some sort of protection is con-

sidered necessary for the chain (or trousers), a celluloid chain cover will be found quite adequate. This should always be ordered by light-weight riders in preference to the metal oil-bath. Celluloid mudguards are lighter than those of steel, and quite serviceable. Moreover, they do not rust.

Aluminium has quite failed, as yet, to enter into the composition of the bicycle frame as a saver of weight. Its only effective use at present is for such rims as the "Roman", made of an aluminium alloy. But they offer little, if any, saving in weight upon steel rims; and if they take the place of the latter, as they seem likely to do, it will be because they cannot rust.

Large numbers of cyclists are so light (and often so delicate) that the weight of their bicycles becomes the factor of first importance for consideration. Such will generally find it profitable to order a 2-speed gear, instead of a 3-speed, the saving in weight being $\frac{3}{4}$ lb. to 1 lb.

Change-speed Gears.—These are now a recognized part of the bicycle, quite as reliable and effective as any other part of it. The near future will find a majority of bicycles everywhere fitted with some sort of variable gear. A machine which is to be treated (or maltreated) as a "hack", habitually neglected and used only for errands within a mile or two of home, should be of the simplest possible construction, and is not worth the addition of a variable gear. The road racer is also rarely found provided with one. Its rider is athletic and physically "fit"; he reduces the weight of his machine by the last possible ounce and can drive his single gear up all ordinary hills. He cannot be convinced that any advantage is gained by the use of variable gears, and his attitude is somewhat unreasonable.

After twenty years' experience, it has been found that the gear of a bicycle which has but one speed should be a little more than ten times the length of crank, and nearly all makers now fit 7-inch cranks and about 72 gear as the normal, or standard. Such a gear is not low enough to enable the average cyclist to climb steep hills with ease and comfort. Hence the prime purpose of the change-speed gear. The reduction afforded by 2-speeds and 3-speeds from the normal is one-quarter to one-fifth, so that the normal gear of 72 is reduced for hill-climbing to 54 or 57. Such a reduction being a little more than ample, it is usual, in the case of 2-speeds, to make the normal gear rather higher, say 77 with 7-inch cranks, than if it were the only gear, so that the high gear becomes more enjoyable and the low gear more useful.

The 3-speed affords not only a reduction from the normal for hill-climbing, but an increase above the normal (usually about one-third) for use downhill or with a following wind—not necessarily for higher speeds, but for that increase of pleasure that is found in the slow pedalling of a high gear when it can be driven with ease. A typical example of the gears afforded by a 3-speed hub is 55, 72, 95, of which the middle is the normal.

Choice between 2-speed or 3-speed hubs must mainly rest on this indisputable axiom: The low gear is a necessity; the high gear is a luxury. The difference in cost is slight. The difference in weight already referred

to almost makes it advisable that very light cyclists should select a 2-speed, if they are anxious to reduce the weight of their mounts to a minimum.

Two of the best and most popular 2-speed gears on the market are the Eadie and the Villiers, and they differ in a vital matter. Both are on the familiar mechanical system of the "epicyclic train", a "sun" or central pinion or cog-wheel, and four "planet" pinions. In the Eadie hub the normal gear is the higher of the two, and the planet pinions only come into operation when the low gear is engaged. At ordinary times the hub revolves solidly, just like a single-speed hub. In the Villiers hub (fig. 522) the reverse is the case, for the lower gear drives solidly, and the planet

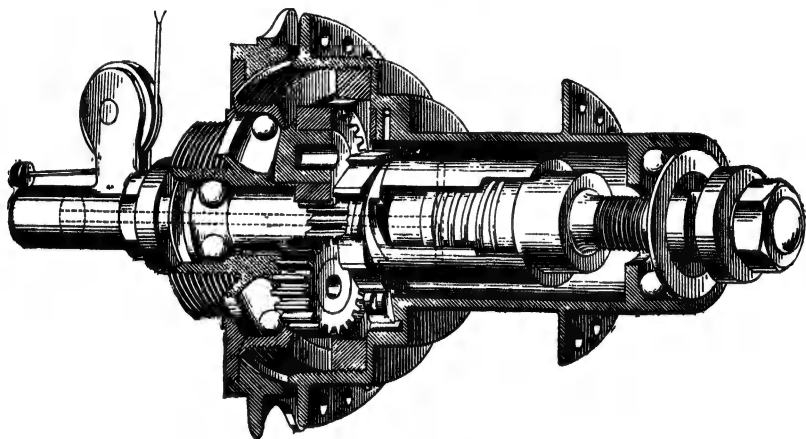


Fig. 522.—Villiers Two-Speed Hub.

pinions or small cog-wheels are only working on the high gear. The average cyclist should order the Eadie. He will do most of his riding on the higher gear, and the gear which is most used should not be complicated by small pinion wheels. If the low gear of the Villiers hub is chosen low enough to be of use for hill-climbing, the cyclist will find himself driving the high gear most of his time, which means excessive work for the small pinions. Very light cyclists of either sex and of no great physical strength may, however, accept this well-made gear with confidence, as they are not likely to suffer any practical disadvantage by generally driving the compound gear. They should be careful to order the low (normal) gear no higher than 59 with 7-inch cranks, or 53 with 6½. The strong athletic road racer, who avoids the worst hills, and can drive a single gear, say, of 72 with 7-inch cranks up most hills, should also adopt this hub in preference to any other form of variable gear. Choosing 72 as his normal (low) gear, he will then have a reserve gear of 96 for fast work under favourable conditions. All the above remarks on the Villiers apply equally to the Sunbeam 2-speed gear, which is placed in the crank bracket instead of the back-wheel hub.

Among the most successful 3-speed hubs on the market are the

Sturmey-Archer and the Pedersen. The former, which is in very general use, is contrived on the sun-and-planet principle (fig. 523). The reduction and increase which it affords for the low and the high gears respectively are as already stated. In ordering this or any other 3-speed hub, the cyclist should be careful to select his normal gear aright. That will be his middle gear of the three speeds, the one which carries the small internal pinions idly round, *en bloc*, running as freely as a single speed. It should be, as nearly as possible, the gear on which he has been accustomed to do most of his riding. Generally it is about $10\frac{1}{2}$ times the crank length, or 74 with 7-inch cranks. If the cyclist's first bicycle is

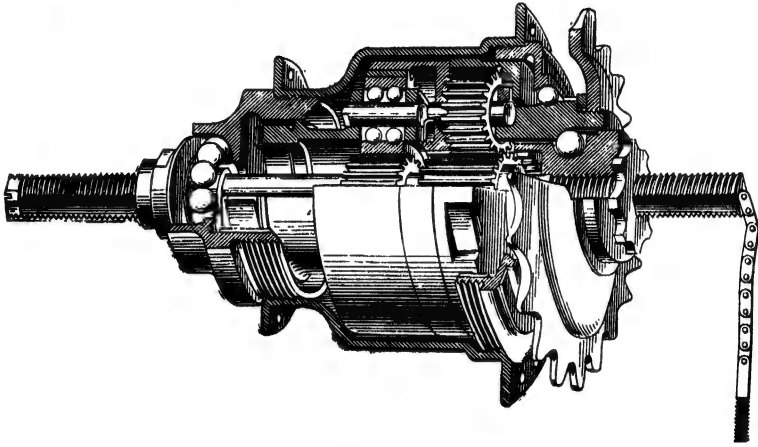


Fig. 523. —Sturmey-Archer Three-Speed Hub.

a 3-speed, he should not go higher than the "ten times" ratio, or 7 by 70, for his normal gear.

The Pedersen 3-speed hub is materially different, in appearance as in every other matter. The high and low gears are obtained by sliding pinions, somewhat after motor-car practice on a small scale, and the protuberance on the hub which carries these pinions gives it a quite distinctive appearance. It has a wider variation between the gears, also, than any other change-speed hub, the reduction for the low gear being one-third, and the increase for the high gear one-half; *e.g.* 49, 73, 109, of which the middle is the normal or solid.

It must be very strongly insisted upon that the low gear of a variable-speed hub is not for *speed* uphill, but for *ease*. The cyclist must be content to ride slowly, and not try to pedal any faster on the low gear than he was doing on the normal. He should not try to change speeds while pedalling, but should "free wheel" for an instant while moving the lever. The Sunbeam and the Humber 3-speed hubs are proprietary articles which can only be obtained in machines of those makes respectively. A 3-speed hub similar to the Sturmey-Archer is made by the Birmingham Small Arms Company.

Tyres. — Pneumatic tyres are now distinguished only by the two

methods of securing the outer cover in the rim of the wheel. (Single-tube tyres are only now made for racing purposes.) These methods are known as the "beaded edge" and the "wired-on" types, and they have about an equal vogue. In the former case, a solid bead on the edge of the cover fits into a corresponding groove in the rim. In the latter case, an endless wire runs in and round the edge of the cover. Both tyres are held in place by the inflation of the inner tube. A stranded wire is used in the Moseley tyre illustrated, but it is usually solid. Other first-class makes of to-day are the Palmer, Dunlop, Clincher, and Michelin. The wired-on type is lighter than the beaded edge by a little, and so is the rim which fits it. The wired-on cover is not quite so easy to handle when it becomes necessary to detach and replace it.

Tyres are made in various weights, and should be chosen according to the weight of the rider and the amount and nature of the work to be done.

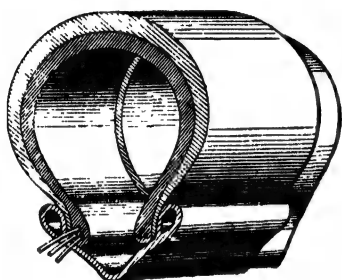


Fig. 524.—"Wired-on" Tyre.

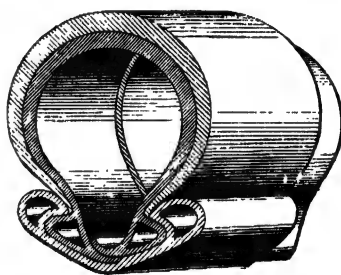


Fig. 525.—"Beaded-edge" Tyre.

In districts where the roads are normally loose and flinty, as in Dorset and Suffolk, light tyres should be avoided by all. Heavy riders in such districts should have tandem tyres, or such as the "Palmer Special". Where roads are good or of average quality, light riders, say of 9 stones and under, have no business with roadster tyres. They should order such as the Dunlop open-sided road-racing tyre or the Clincher or Moseley Featherweight, of $1\frac{3}{8}$ -inch section. Ladies should accept this advice only if they are prepared to keep their tyres properly inflated, a precaution which they habitually neglect. Such tyres under such weights will last as long as roadsters will under average weights, and the covers are less costly to replace.

Heat, and oil or grease, are the two chief enemies of tyres. After a free oiling of the bearings, see that the oil does not run along the spokes into the tyres. Cold and damp do no harm to rubber; but when the covers are cut and worn, extra care should be taken to keep water out of them, which will soon rot the internal canvas and allow the air-tube to burst through. When the machine is out of use for long, suspend it from the ground, or turn it upside down, so that the weight of the machine does not stand on deflated tyres.

Punctures.—When covers must be removed to repair punctures, the back cover should be detached on the side farthest from a naked chain.

In the case of a wired-on cover, having removed the valve and its lock-nut, press the edge of the cover into the bottom of the rim at the opposite side of the wheel to the valve, and work round with the thumbs in opposite directions towards the valve. This will make a loop of loose cover over the valve which is usually big enough to lift off the rim without the use of a lever. Always slightly inflate the tube before replacing the cover, or the tube is liable to be nipped under the edges of it. The little rubber sleeve which fits over the stem of the valve is very liable to perish, and is so often the cause of deflation that it is always best to examine it, in case of deflation, before looking for a puncture, unless the latter is quite obvious. When a nail punctures a tyre and remains in the cover, it will usually be found to have pierced the air-tube on *both* sides of it. This should always be looked for. Before replacing a cover, run the fingers round its under side, to see if any sharp point remains in it.

Never try to stick a patch upon an air-tube without having first so cleaned away all the white sulphurous exudation that the black rubber is laid bare. This is best done with moisture and the head of a brimstone match, or the small cake of sulphur now commonly included in a repair outfit. Before purchasing one of the latter, see that the rubber solution in the tube is not dried up. If a puncture occurs close to the edge of an existing patch, the latter should be removed with benzine, petrol, or naphtha; but as this is rarely possible on the roadside, the old patch should be reduced in thickness with sandpaper, before a new one is applied large enough to cover the old one as well. In the case of a tyre which bursts when no repairer is within easy reach, the tube must first be patched, then the under side of the cover should receive a canvas patch, and finally a patch is necessary on the outside. If such a thing as an "outside repair band" is not carried in the wallet, a temporary band may be cut from the stout cloth usually found therein, and the edges of it tucked into the rim on both sides, under the edge of the tyre, when it will be gripped fast by inflation. The leather tongue of the rider's shoe has sometimes been pulled out and so used.

Saddles.—Saddles should be in a horizontal position, tilting neither up nor down, nor to either side when viewed from behind. The peak of the saddle should be from 2 to 4 inches, according to taste, behind the centre of the crank bracket. If a saddle squeaks, turn it upside down and run a very little oil all round the cantle-plate and nose-piece. A cyclist who has a machine a little too high for him may make the reach just right by turning the clip of the saddle upside down. The leather of a new saddle will stretch in use, and that soon and extensively if subjected to much moisture (rain or perspiration). The tensioning-nut and rack under the peak must then be used for tightening the leather; and the saddle should occasionally be dressed on its under side with dubbin, or the cream used for brown boots. After exposure to wet, the leather should dry slowly and naturally, and then the lubricant be applied.

Lamps.—The oil lamp is still highest in popular favour, although the

acetylene lamp is a powerful rival. The wisest economy is to give half a guinea for a lamp. Oil lamps should ride quite vertically on the machine, and the lamp bracket must be bent either way until this position is secured. Specially prepared illuminants, such as Price's lamp oil, are the best, but in remote country districts it is easier and almost as good to use pure sperm oil, which is also an excellent lubricant. When a lamp has not been in use for several months, it will often burn badly. In that case throw away the oil and wick and recharge with new. The makers of the best lamps advise the user to change the wicks every two or three weeks.

The exceedingly brilliant light afforded by acetylene gas (formed by allowing water to drip on to calcium carbide) has brought it into much use in ill-lighted country districts. But it is more wasteful and more troublesome than the oil lamp; and even when the gas lamp is used for longer journeys, it is a good plan to keep an oil lamp for short runs. The purchaser should ask for printed instructions on the use of an acetylene lamp, and these should be carefully carried out, as there is an element of danger in the use of this gas.

Paraffin lamps of good make are clean and easy to light, but the light is not quite equal to the other. Paraffin wicks should only be used in paraffin lamps. Candle lamps are very clean, but the light is inferior, and should be extinguished when the machine is left standing.

Brakes.—The various forms of rim brake made under Bowden licence by all the principal makers are now almost universal. They have but one drawback, when properly made and fitted, and that is the unsightly rusting of the rim when the action of the brake blocks has worn away the enamel or plating, and exposed the steel. This drawback is likely to bring into increasing use those rims made of aluminium alloy, such as the Roman.

Another popular form of brake is the "coaster" hub, where the brake is contained in the back-wheel hub and is operated by back-pedalling. It saves the use of a rim brake on the back wheel and so a lever on the handle-bar, and it is now obtainable combined with several forms of variable speed-gear. The hub of a wheel, however, is an inadvisable place for the accumulation of weight. The simple, single-speed coaster hub, of which the New Departure and the Eadie are the best-known examples, requires special lubricants, on account of the heat generated by the brake. The former should be taken to pieces once a year and charged with the special lubricant sold for the purpose. The Eadie hub has a lubricator over the brake, into which heavy oil should frequently be put.

Learning to Ride.—Hire a machine a good deal too small for you, and have the saddle so low down or far back that you can put both feet on the ground while seated on the saddle. Choose a quiet road with a slight decline on which the machine will run by itself. Learn to balance and steer the machine before you put your feet on the pedals at all. Remember the golden rule that the steering-wheel should be quickly turned *in the same direction in which it is falling*, and as quickly back again. Do not grasp the handles too tightly. When you can steer the machine down the slope

in a straight line, walk back and learn to turn the pedals round as you descend; and finally ride up the slope. When you have learned to ride, keep to your own side of the road. Never, under any circumstances, overtake a vehicle on the near side, or inside, tramcars excepted. Never turn a corner on the wrong side, and never take risks. If you think you have just nice room to slip in between two vehicles, or between a pedestrian and the footpath, refrain from attempting it.

Tricycles.—The remarkable strides made by mechanical science in the development of the bicycle, particularly in the reduction of unnecessary weight, have made the tricycle once more a useful possibility; and elderly or nervous cyclists should certainly consider it. Several of the very best makers offer light, strong, and efficient tricycles at prices between £20 and £30, while the weight varies between 30 and 45 lbs., according to equipment. Several well-known makes are offered with variable gears, such as the Sunbeam, Premier, and Humber. They should generally be geared a few inches lower than bicycles.

MOTORS AND MOTORING.

The Selection of a Car.—Just as in the case of a carriage one has to bear in mind, when making a choice, what is the particular purpose the vehicle is required for, and over what roads it will be driven, so in the selection of a motor car does the prospective purchaser have to consider the requirements the car has to answer,—with this difference, that the various reasons which guide one to a final choice are more numerous and of greater importance in the latter case than in the former. For instance, quite apart from the question of cost, which is always a prime factor in the matter, the county in which the car will be principally used has to be borne in mind, as a small car of a low power will do better and much more cheaply in a flat district like the Fens than the high-power car necessary for such a county as Gloucestershire. Again, does the owner intend to be his own chauffeur or will he engage a man to look after his car? as there is a limit to the size of car to which the owner can personally attend in a proper manner, and with due regard to the other claims upon his time and attention. A man with business occupations must be an enthusiast on motoring if he is the possessor of a large car and looks after it himself, as the amount of toil and care taken up by a car of any pretensions to size is surprising, and only to be realized by actual experience.

If one wants a car for purely town work, just to take the head of the house to and from his suburban residence and the office, and for the ladies of the household to pay calls with or to do a little shopping, an excellent car for the purpose is the electrically-propelled vehicle or, as an alternative, the steam car, the latter having the additional advantage of being suitable for country runs. Both these types of cars are noted for easy movements,

facility for frequent stopping and starting. A closed car seems a *sine qua non* for town purposes, and petrol cars of this description would have to be of the four- and six-cylinder types to obtain the requisite silence of running, and to be free from the drawbacks of noise, heat, and the objectionable odour of petrol, which is probably much more distressing to women than to men. For touring purposes one has to bear in mind so many things, that the best advice to give a prospective purchaser is to go to a good firm, one whose name is well known, explain fully the requirements the car must answer, and then put himself unreservedly in their hands. Such a firm will deal justly and honestly with the purchaser, for their reputation depends upon every car that they sell and the satisfaction it gives to its owner. Possibly, however, our reader may wish to purchase a secondhand car; in such a case he will save money if he gets it thoroughly overhauled by an expert, as so many things have to be borne in mind when buying secondhand cars: what is its age? are the makers still in business? is the mechanism, both as a whole and in its separate parts, in perfect condition? are the wheels true in running and firm on their bearings? does the engine run well? No car should be purchased unless the vendor will allow a trial run of at least thirty miles, with a couple of hills of stiff gradient. Do not let the purchaser be deceived with too much varnish and polish one can see one's face reflected in on a secondhand car, as upholstery and varnish are not essentials in the running; the engine and the chassis are the vital considerations, as varnish, like charity and overcoats, may cover a multitude of sins. The cost of running any particular make of car must be remembered and entirely depends upon the mileage done. The heaviest item in the bill is always that of the tyres, and if the car is always run on the speed limit the charge becomes not merely heavy but excessive.

Tyres.—Pneumatic tyres should always be chosen of sufficient size and strength properly to support the weight of the car when running at high speeds. Some cars are fitted with lighter tyres on the front wheels than on the rear. When this is noticed the maker should be asked to fit the same calibre tyres on both fore and rear wheels; by doing this the great convenience of being able to interchange the tyres is obtained and gives them a life of at least one-third longer. Some people prefer to be without the risk of punctures and have solid tyres; in this case the car must be well sprung, in order that the mechanism may be free from shocks caused by want of smoothness in running. The life of a solid tyre is usually longer than that of a pneumatic, but for comfort in travelling, and in all cases where the car is run at a speed exceeding twenty miles per hour, the air-filled tyres should always be chosen. There are many non-skidding and puncture-proof devices fitted to tyres to prevent the car from skidding when running on greasy roads; the best known is the leather band fitted with steel studs. This may be either of the fixed or detachable type. Devices of this kind are certainly desirable, for they save many and many a puncture, and yet many "speed" people object to the diminution of the

resiliency of tyre caused by their use. The inflation of the inner tube is a long and wearying task, but it is most important that the tyres should be properly inflated to the degree required according to the weight they have to support. About four atmospheres to a thousand pounds per axle is a fair average to take. If the wheels are fitted with detachable rims, tyre troubles become practically non-existent if a spare pair of rims and tyres are carried, as directly a burst cover or a puncture occurs, all that is necessary is to take the rim with the damaged tyre off and replace it with one of the spare ones, an operation which takes only a very few minutes. The mechanical principles of the petrol motor engine are about the same as those of a gas engine, and an explanation of these is not within the province of this work.

Garage.—Most people who are owners of the larger motor cars are converts from horsed vehicles, and have had their stables and coachhouses converted into garages, but such conversions are not always successful, and unless a good deal of money is spent are usually deficient in one important item, viz. top lights; therefore wherever it is possible it is better to have a proper motor garage built in accordance with the peculiar requirements necessary. A noticeable feature of a motor house is the pit to give ready access to the under mechanism of the car; this pit is usually made much too short and much too deep. Architects who are not motorists have an idea that four feet long and about the same in depth are the proper dimensions, whereas it should never be less than eight feet long and need not be more than two feet deep; it should be lined with concrete in order to catch the drippings whenever the engine is being cleaned and oiled up. *On no account should the pit be left uncovered*; a person walking into the garage in the darkness might easily fall in and break a limb. A covering of wood, which for greater convenience may be made in two pieces, ought to be let in at floor level to form a protection whenever the car is not over the pit. Every garage ought to be well heated in order that the metal parts may not suffer from the effects of damp either by rusting or tarnishing, not merely because it would offend the eyes but owing to the effect it has on the working of the car. The springs, for instance, occasionally show signs of rust when kept in a damp house, thus militating against easy running. One wall may be conveniently covered with a range of cupboards and shelves, in order that spare parts, extra covers and inner tubes of tyres, tools, and the thousand-and-one odds and ends to be found in connection with a motor may be kept in an orderly manner, and not left, as in many cases, littered about the floor or jumbled together in a box. The cupboard which is used for the rubber goods should be fairly light-proof, as indiarubber keeps best in a state of darkness; inner tubes should be put away partly inflated.

Petrol.—The storage of petrol is the most worrying thing in connection with motor cars, and there are Board of Trade regulations rigorously enforced with regard to the handling and proper storage of this spirit. It has to be kept in metal vessels (none of which may exceed 2 gallons in capacity) fitted with screw stoppers. No greater quantity than 60

gallons may be kept in any one place at a time. If the petrol is kept in a storehouse nearer than 20 feet to any other building, the local authority under the Petroleum Act must be notified. Most motorists store their petrol in an underground concrete chamber placed as far as possible from any building. *All operations dealing with petrol ought to be performed in the open air and never in the proximity of a naked light.* The non-observance of this essential precaution has led to many fatal accidents.

The car must be cleared after every run directly it returns to the garage, and a stand-pipe and hose are necessary adjuncts to such a place. Mud should never be allowed to dry on the car; it should be washed off before it dries in order to keep the varnish in good condition; metal parts can be easily cleaned with one or the other of the many polishing powders sold for the purpose. The leather upholstery will also repay one for being well looked after; whenever it shows signs of getting dirty it should have a quick wash with a good-quality soap and water, thoroughly drying the leather at once, with a final polishing up with soft fabric rags. When in the garage the car ought to be entirely covered with a protecting fabric of unbleached linen; the cover should be large enough to enclose the car when the hood is up, if it is of a make provided with one of these desirable adjuncts.

Legal Aspects.—Before a motorist can make use of his car, the law demands that certain things must be done. First, it must be registered and the number plates or identification marks properly fitted; secondly, the licence to drive must be in his possession; and, thirdly, the Inland Revenue tax must be paid within fourteen days of coming into the possession of the car. Let us take these three things *seriatim*. The owner to register his car must make application to any county council on a special form to be obtained from them, enclosing with it the sum of 20s. The owner makes his application for registration to any authority, whether he lives in the area of the jurisdiction of such registering authority or not. After a few days the county council to whom he has applied will send him a copy of the register with a notice of the identification marks which have been allotted to him; these marks consist of the index letter or letters of the council and a number, *e.g.* AR. 918. If the car is afterwards sold or changes owners, notice of such change of ownership must be sent to the council who originally registered the car, and a fee of 5s. paid for the re-registration. The identification marks may be either painted on the car itself at the back and front or be on two detachable plates; the letters and figures must be white on a black ground and are to be 3½ inches high. One of the marks must be placed on the front of the car, the other at the rear; this latter must be well illuminated at night time, so that the number can be seen easily after darkness has set in.

The driver's licence is his most important document, and must be actually in his possession whenever the car is in use, so as to be produced to any police officer in uniform who may demand to see it. This licence is to be obtained from the council within whose area the driver resides;

application is to be made on a special form and a fee of 5s. paid; this fee must be paid every subsequent year and the licence renewed for as long as the holder continues to drive a motor car. If a motorist drives his car at a greater speed than twenty miles per hour, or at a less speed if to the common danger, or if he appears incapable of managing his car, any police officer may arrest him without a warrant if he refuses to give his name and address, and if the car does not bear its number plates, or the driver does not produce his licence when requested.

The Inland Revenue tax for motor cars from the beginning of 1910 varies according to horse-power. Under $6\frac{1}{2}$ horse-power the tax is two guineas per annum; from $6\frac{1}{2}$ to 12 horse-power it is three guineas; from 12 to 16, four guineas; from 16 to 26, six guineas; and so on. Motor cycles are charged one pound each. It must be remembered that the Inland Revenue licence is not transferable with the motor car.

Unless the owner is an exceptionally fortunate man, there is sure to arise some incident in which the presence of a police constable is involved. In such a case always be calm and firm, but never attempt to wrangle with the officer; for one thing it is a loss of dignity, for another it may lead the officer to take serious notice of what might otherwise have passed by as a trivial occurrence. And if the case has to go into court, and the motorist loses, the magistrate may order the licence to be endorsed, and this endorsement stands against the owner always. Even if the original licence be lost, the duplicate will bear upon it all the endorsements that have been made from time to time by orders of the court.

When motoring, either as a driver or a passenger, always wear warm clothing, as the speed of travelling even on what may be called a warm day always rapidly chills the body unless it be protected by good clothes.

DOMESTIC PETS.

THE DOG.

Everyone who wishes to own a dog should know what to select, and how to manage upon rational lines the animal he has selected. Due consideration must of course be paid to the space available, the time that can be given to attend to its daily needs, its health, exercise, and enjoyment, and the purposes for which it is required.

By far the greater number of dogs are kept as house-guards and companions. A dog required for such a purpose should not be large. A large dog costs more to purchase and to feed, while confinement within doors makes its life unbearable. The dog should be in good condition, of the right age, clean in skin, without vermin, fat, plump, lively and happy, a good feeder, and (if a puppy) with good, thin, small, semi-transparent teeth. These points are of universal application, no matter what kind may be selected.

The best guard dogs are bull-dogs, bull-terriers, mastiffs, Newfoundlands, and Great Danes; the most companionable, Newfoundlands, St. Bernards, Great Danes, collies, and setters; the best as pets, King Charles spaniels, pugs, Yorkshire terriers, Pekingese, Brussels, Griffons, and Maltese; the most sagacious and teachable, poodles, Scotch collies, Newfoundlands, St. Bernards, setters, and fox-terriers; the most useful, fox-terriers, spaniels, and retrievers.

DIFFERENT KINDS OF DOGS.

Basset.—The basset is a hound pure and simple. Its head is grand and impressive, with many of the blood-hound characteristics; ears of good length, curling inwards, and set on low; eyes dark and deep set, showing the haw; body long, low, with powerful shoulders and quarters; legs very short with plenty of bone, the fore-legs crooked; stern carried gaily; colour black, white, and tan.

Beagle.—The beagle, rough and smooth, is a compactly built hound, without coarseness, conveying the impression of great stamina and activity, Head of fair length, powerful without being coarse; skull domed, moderately wide, with an indication of peak; stop well defined, muzzle not snipy, and lips well flewed. Nose black, broad, and nostrils well expanded. Eyes brown, dark hazel, or hazel, not deep-set or bulgy, and



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with a mild expression. Ears long, set on low, fine in texture, and hanging in a graceful fold close to the cheek. Neck moderately long, slightly arched, and throat showing some dewlap. Shoulders clean and slightly sloping. Body short between the couplings, well let down in chest; ribs fairly well sprung and well ribbed up, with powerful and not tucked-up loins. Hind-quarters very muscular about the thighs, stifles and hocks well bent and hocks well let down. Fore-legs quite straight, well under the dog, of good substance, and round in bone. Feet round, well knuckled up, and strongly padded. Stern of moderate length, set on high, and

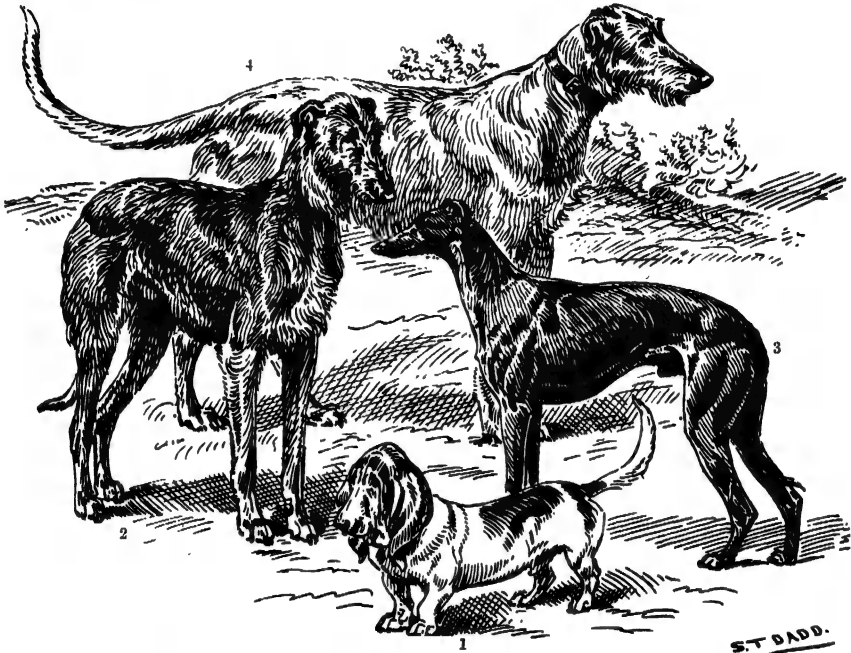


Fig. 526.—1, Basset. 2, Deerhound. 3, Greyhound. 4, Irish Wolfhound.

carried gaily, but not curled over the back. Colour, any recognized hound colour. Coat, in smooth variety, smooth, very dense, and not too fine or short; in rough, very dense and wiry. Height not exceeding 16 inches. The *Pocket Beagle* should resemble an ordinary beagle in miniature, be very compact and symmetrical, and show great quality and true beagle type. Its height does not exceed 10 inches.

Bloodhound.—The very ancient breed of bloodhounds is believed to be derived from the St. Hubert hounds, maintained in St. Hubert's Abbey in the Ardennes from the earliest ages. This breed—subdivided in the eighth century into the two varieties, black and white, of which the former was the more valued—has been maintained in England in purer type than in any other country. The general character is very powerful, standing over more ground than other hounds. The skin is

"stop" well defined, eyes wide apart and black; under-jaw wide, and well turned up; nose large, black, very short, and good "lay back"; small "rose"-shaped ears; back short and "roached"; ribs well sprung; fine loin; tail short and set on low; coat fine, short, and close. The colour should be white, brindle, red, fawn or fallow, whole, smut, mixed or pied.

Bull-dog, French.—The general appearance of the French bull-dog is of an active, intelligent, and very muscular dog, of cobby build, and heavy in bone for its size. Head of great importance, large and square; forehead should not be flat, but slightly rounded, the top of the skull between the ears being flat. The muscles of the cheek well developed but not prominent. Stop as deep as possible; but no furrow up the skull. The skin of the head should not be tight. Muzzle short, broad, turned upwards, and very deep. The lower jaw should project in front of the upper, be broad and square and turn up, but should not show the teeth. Bat ears, of medium size, large at the base and rounded at the tips; placed high on the head and carried straight. The orifice of the ear is to the front and the skin should be fine and soft to the touch. Eyes of moderate size, neither sunken nor prominent, and dark. No white should be visible when the dog is looking straight in front. They should be placed low down in the skull and wide apart. The nose must be black and large. Upper lips should be thick and broad, hanging over the lower jaw at the sides without being pendulous, meeting the under lip in front, thus covering the teeth. Neck thick, short, and well arched. Chest wide and well let down between the legs; ribs well sprung; body short, cobby and muscular and well cut up; back broad at the shoulder, tapering towards the loins, and well roached. Fore-legs short, straight, and muscular, set wide apart, but not so short as to detract from the dog's activity; hind-legs strong and muscular and longer in proportion than the fore-legs, so as to elevate the loin; hocks well let down. Feet compact and strong, with the knuckles prominent and high. Tail set on low, short, thick at the root, tapering to a point, and should have a downward carriage. It should be smooth and devoid of fringe. Coat fine in texture, short, close and smooth, hard only from its shortness and closeness; not wiry. Faults: Too prominent under jaw, thereby showing the teeth; tongue showing when mouth closed; light-coloured, or prominent eyes; long and coarse coat; tail carried above level of back; dewlap; bad movement. Black or black-and-tan colour will disqualify.

Bull-dog, Miniature.—The general appearance of the miniature bull-dog must, as nearly as possible, resemble that of the big bull-dog. Skull large, forehead flat, the skin about it well wrinkled, the stop broad and deep, extending up the middle of the forehead. Eyes of moderate size, situated low down on the skull, and as wide apart as possible. Ears to be "rose" if possible; bat ears are a disqualification. Face as short as possible, nose jet black, deeply set back, almost between the eyes. Muzzle to be short, broad and turned upward. The lower jaw should project considerably in front of the upper and turn up. Neck to be short with much

loose skin about it; "frogginess" is objectionable. Chest very wide, round, and deep. Back short and strong, narrow towards the loins and broad at the shoulder. A roach back is desirable. Tail short and not carried above the back. Fore-legs short in proportion to hind-legs. Hind-quarters much lighter in proportion than fore-quarters. Weight 22 pounds or under.

Chow-Chow, Chinese.—Its chief points are:—Skull flat and wide; tongue and lips black; eyes small and dark; ears very small and pointed, carried erect and forward; chest wide and deep; body short and powerful; fore-legs straight and large, with small round feet; tail tightly curled over the back: coat very profuse and rather coarse in texture. Colour: Whole

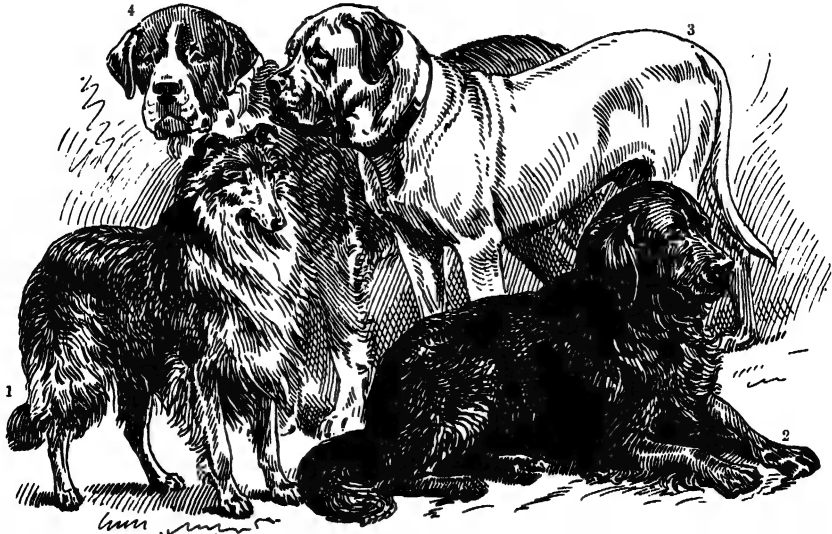


Fig. 527.—1, Collie. 2, Black Newfoundland. 3, Mastiff. 4, St. Bernard

coloured black, red, yellow, blue, white, not in patches (the under part of tail and back of thighs frequently lighter colour).

Collie.—The collie is a great favourite with dog lovers, being an admirable companion and highly intelligent. Its points are:—Head long; skull fairly wide, not too round; eyes dark and expressive, placed obliquely; ears small, set far back and high, when excited semi-erect with points hanging down and forward; chest deep, but not wide; fore-legs straight, strong, and hard; feet compact and strong, of fair size; soles well padded; hind-legs straight. In the rough variety, there should be thick undercoat with a coat of hard hair over; in the smooth kind, only the dense undercoat. Tail moderately long and well-flagged, sweeping downwards two-thirds of its length, the remaining third curved beautifully backwards. The colour from the exhibition stand-point is immaterial.

Dachshund.—The dachshund is a difficult dog to break, as it is very nervous and high-spirited but extremely gentle. It requires much exer-

cise and very careful feeding. The principal points are:—Head long and narrow; peak well developed; jaw strong and level; ears long, broad, and soft, and set on low; chest deep and narrow; breast-bone prominent; fore-legs very short and strong in bone, well crooked, but symmetrical; skin thick and supple; coat short and strong; loins well arched, long and muscular. Dark red. Black-and-tan.

Dalmatian.—In general appearance the Dalmatian is a strong, muscular, active dog, symmetrical in outline, free from coarseness, and lumber; capable of great endurance combined with a fair amount of speed. Head of fair length, skull flat, rather broad between ears, moderately well defined at temples, and fair amount of stop; profile not in one straight line from nose to occipital bone as in bull terrier; entirely free from wrinkle. Muzzle long and powerful, lips clean, fitting the jaw moderately close. Eyes set fairly well apart, medium size, round, bright, sparkling, with intelligent expression; colour greatly depending on markings of dog; in black-spotted variety should be dark, black or dark brown; in liver-spotted, light yellow or light brown; rim round eyes should be black in black-spotted variety, and brown in the liver-spotted, never flesh-coloured in either variety. Ears set on rather high, moderate size, rather wide at base, gradually tapering to rounded point, carried close to head, and should be thin and fine in texture, and always spotted, the more profusely the better. Nose in black-spotted variety, black; in liver-spotted, always brown. Neck fairly long, nicely arched, light and tapering, and entirely free from throatiness. Shoulder moderately oblique, clean and muscular, denoting speed. Chest not too wide, but very deep and capacious, ribs well sprung, never rounded like barrel hoops (denoting want of speed). Back powerful; loin strong, muscular, and slightly arched. Legs and feet of great importance; fore-legs perfectly straight, strong, and heavy in bone, elbows close to body. Fore-feet round, compact, with well-arched toes (cat-foot) and round, tough, elastic pads. Hind-legs, muscles clean though well defined; hocks well let down. Nails in black-spotted dogs, black and white; in liver-spotted, brown and white. Tail not too long, strong at root and tapering to tip, free from coarseness; should not be set on too low, and carried with slight curve upward, never curled; should be spotted, the more profusely the better. Coat short, hard, dense, fine, sleek and glossy in appearance, but neither woolly nor silky. The ground colour in both varieties should be pure white, very decided, and not intermixed; the spots, as round and well defined as possible, the more distinct the better, in black-spotted, the richer and deeper the black the better, in liver-spotted, brown; size of spots from sixpence to florin: the spots on head, face, ears, legs, and tail and extremities smaller than those on body. Weight, dogs, 55 pounds; bitches, 50 pounds.

Dandie Dinmont.—The Dandie Dinmont is equally at home in the house or out of doors. Its points are:—Head large and heavy-looking in proportion to its size; skull wide and covered with a top-knot of light silky hair, generally wavy; muzzle deep and moderately wide (it

should on no account have a foxy appearance); jaws strong and teeth level; ears tapering, hanging close to the cheek; eyes dark hazel; legs straight; tail carried gaily; coat soft but not silky. The colour pepper or mustard. Weight 14 to 24 pounds: best weight 18 pounds.

Dane, The Great.—The Great Dane is not heavy or massive as the mastiff, nor should approach the greyhound type. Remarkable in size; very muscular, strongly though elegantly built; graceful in form and outline; bright and brisk in expression. The head and neck should be carried high, with a look of daring; and movement free and graceful. It is good-tempered, affectionate, faithful, and not demonstrative to strangers; intelligent, always alert, courageous, and an unrivalled watch-dog. Easily controlled when well trained, but, if too much confined, kept on a chain, or ill-treated, may grow savage. Minimum height of adult dog, 30 inches, of bitch, 28 inches. Minimum weight of dog, 120 pounds, of bitch 100 pounds, the greater height and weight preferred, provided that quality and proportion are also combined. Great length and strength of jaw: muzzle or foreface broad, skull proportionately narrow, so that the whole head when viewed from above or in front has the appearance of equal breadth throughout. Length of head varies with height of dog; 13 inches from tip of nose to back of occiput is a good measurement for a dog standing 32 inches at shoulder. Length from end of nose to point between eyes equal to, or preferably longer than, length from that point to back of occiput. Skull flat rather than domed, with a slight indentation running up centre; the occipital peak not prominent. A decided rise or brow over the eyes, but no abrupt stop between them. Face well chiselled, foreface long, of equal depth throughout, and well filled in below the eyes, with no appearance of being pinched. The muscles of the cheeks should be quite flat, with no lumpiness or cheek bumps, the angle of the jaw-bone well defined. Lips should hang quite square in front, forming a right angle with the upper line of foreface. The underline of the head, viewed in profile, runs almost in a straight line from the corner of the lip to the corner of the jaw-bone, allowing for the fold of the lip, but with no loose skin to hang down. The lower jaw should be about level, or not project more than $\frac{1}{8}$ inch. The bridge of the nose should be very wide, with a slight ridge where the cartilage joins the bone (a characteristic of the breed). Nostrils large, wide and open, giving a blunt look to the nose; a butterfly or flesh-coloured nose not objected to in harlequins. Ears small, set high on the skull, carried slightly erect with the tips falling forward. Neck one of the chief characteristics; should be long, well arched, and quite clean and free from loose skin, held well up, snakelike in carriage, well set on the shoulders, and the junction of head and neck well defined. Shoulders muscular but not loaded; well sloped back, with the elbows well under the body, so that when viewed in front the dog does not stand too wide. Fore-legs perfectly straight, with big flat bone; feet large and round, toes well arched and close, nails strong and curved. Body very deep, with ribs well sprung and belly well drawn up. Back and loins

strong, the latter slightly arched as in the greyhound. Hind-quarters and thighs extremely muscular, giving the idea of great strength and galloping power. The second thigh long and well developed, as in greyhound, hocks set low, turning neither out nor in. Tail strong at the root, and ends in a fine point, reaching to or just below the hocks; carried, when the dog is in action, in a straight line level with the back, slightly curved towards the end, but should not curl over the back. Hair short, and dense, and sleek-looking, and in no case should it incline to coarseness. It is lithe, springy, and free, action high; hocks should move very freely, and head be well held up. Colour, brindle, fawn, blue, black, and harlequin.

Deerhound.—The head of the deerhound should be long and narrow; the nose black and pointed; lips level; ears small, carried in a fold, soft and silky without long hair. The neck should be long and strong, with sloping shoulders and deep chest; the body long, and the loins arched with great breadth across the hips. The legs should be very straight. There should be everywhere plenty of bone. The coat should be rough and harsh on the body, and ought to show no inclination to silkiness. The colour may be any shade, grey, brindle, yellow, fawn, dun, or drab. If, however, white markings occur in the chest and toes, they are considered objectionable. The right texture of the coat, as well as size and shape, are the chief points.

Foxhound.—The points of this, the greatest of our hunting dogs, may be summarized as follows:—Head of full size, but not heavy; brow pronounced, but not high or sharp; nose long and wide, with open nostrils; ears set on low and lying close to cheek. Neck long and clean, tapering finely. Shoulders long, muscular, well-sloped. Back and loin muscular, with no contraction between. Legs perfectly straight and very strong; feet, round with strong pads and nails. Colour various; coat short, dense, hard, and glossy. Tail gently arched, carried gaily over back, slightly fringed with hair on underside, tapering to a point. Weight, 70 to 80 pounds for a dog; 60 to 70 pounds for a bitch.

Greyhound.—In the greyhound, the head should be long and lean, with powerful, but not clumsy jaws; teeth very strong; eyes dark and full of fire; ears small and fine; neck long but graceful; chest fairly wide and deep. The body should be long and powerful at the loins, slightly arched; fore-legs straight and powerful, with round feet resembling those of a cat, well knuckled up; tail long and carried low. Colour immaterial.

Greyhound, Italian.—The general appearance of an Italian greyhound should be that of a miniature English greyhound, more slender in all proportions, of ideal elegance and grace in shape, symmetry, and action. The head has 20 points allotted to it in the Italian Greyhound Club standard. Skull long, flat, and narrow; muzzle very fine; nose dark in colour; ears rose-shaped, placed well back, soft and delicate, and should touch, or nearly so, behind the head; eyes rather large, bright, and full of expression. The body has 20 points. The neck should be long and gracefully arched; shoulders long and sloping; chest and brisket deep and narrow; back

curved and drooping at the hind-quarters. The legs and feet have 30 points. Fore-legs straight, well set under the shoulder; fine pasterns; small delicate bones; hind-legs with hocks well let down; thighs muscular; feet, the long "hare's foot". The tail, coat, and colour have 15 points. The tail should be rather long, fine, with low carriage; skin fine and supple; hair thin and glossy like satin. Colour: Preferably self-coloured; colour most prized, golden fawn; but all shades of fawn, red, mouse, blue, cream, and white are recognized, and blacks, brindles, and pied less desirable. Action has 15 points, and should be high-stepping and free. Weight of two classes: one 8 pounds and under, and one of over 8 pounds.

Griffon, The Brussels.—The general appearance of the Griffon Bruxellois is a small, cobby, smart little dog, with very intelligent expression and monkey face. Head rounded, furnished with somewhat hard, irregular hairs, longer round the eyes, on the nose, cheeks, and chin; ears semi-erect; eyes very large, black, or almost black; eyelids edged with black; eyelashes long and black; eyebrows covered with hairs, but leaving the eye they encircle perfectly uncovered; nose jet black, short, surrounded with hair converging to that which surrounds the eyes; very pronounced stop or break; lips edged with black, furnished with moustache, a little black in the moustache not a fault; chin prominent, without showing the teeth, and edged with a small beard. The incisors of the lower jaw should extend beyond those of the upper jaw. Chest rather wide and deep; legs as straight as possible, of medium length; feet short, round, and compact; pads black; nails black; tail erect, and cut to two-thirds; coat harsh and wiry, irregular, rather long and thick. Colour red. Weight: Light weight, 5 pounds maximum; heavy weight, 9 pounds maximum. Faults: Light eyes, silky hair on head, brown nails, teeth showing. Disqualifications: Brown nose, white hairs, and hanging tongue.

The *Griffon Belge* has the same standards of points, with this difference: the colours included are black or black-and-tan. The *Petit Brabançon* has the same standard as the other two, but this variety is smooth-coated.

Japanese Chin Dog.—The Japanese Chin dog—to give the name more correct than the former title, Japanese spaniel—is one of the daintiest of toys. It has a reputation for excessive delicacy, due in most cases to over-cossetting, and the most successful breeders are those who give their dogs plenty of fresh air and outdoor life winter and summer. It is a lively, highly-bred, little dog, of dainty air, smart, compact carriage, and profuse coat. Should be essentially stylish in movement, lifting the feet high when in motion, carrying the tail (which is heavily feathered) proudly curved or plumed over the back. Size varies considerably, but the smaller the better, type and quality being equal. When divided by weight, the classes should be for under and over 7 pounds. Coat long, profuse, and straight, free from curl or wave, and not too flat; it should have a tendency to stand out, more particularly at the frill, with profuse feathering on the tail and thighs. Colour should be either black-and-white or red-and-white (parti-

coloured). The term red includes all shades of sable, brindle, lemon, and orange, but the brighter and clearer the red the better. The white should be clear white, and the colour, whether black or red, should be in evenly distributed patches over body, cheeks, and ears. The head should be large for the size of dog, broad skull, rounded in front; eyes large, dark, set far apart; muzzle very short and wide, and well cushioned—that is, the upper lips rounded on each side of the nostrils, which should be large and black, except in red-and-white dogs, when a brown nose is as common as a black one; ears small, set wide apart, and high on the head, carried slightly forward, V-shaped. Body squarely and compactly built, wide in chest, cobby in shape; length of a dog's body should be about its height. Legs should be straight and bone fine; feet long and hare-shaped. Legs should be well feathered to the feet on the front legs, and to the thighs behind; and feet should also be feathered.

Mastiff.—When properly trained the mastiff has no superior as a guard to person and property, but the training requires considerable tact. The head should be large and massive, skull flatly rounded; muzzle square and deep; teeth level; eyes dark brown or hazel, and wide apart; legs muscular and straight, with plenty of bone; chest deep and broad; loins broad and powerful, with a good flank; feet small, compact, and close; tail long, strong, and well set on; coat fine and close. Colour, brindled or fawn. The popular colour is the latter, with black points, such as muzzle, mask, and ears. Size is of great importance, but symmetry must be maintained. A regulation measure is from 29 to 32 inches at the shoulder; weight from 120 to 170 pounds.

Mexican Hairless Dog.—This breed is not yet admitted by the Kennel Club to a separate register, but classed merely with foreign dogs. It is generally of a uniform mouse colour, and its average weight is about 18 pounds.

Newfoundland.—The Newfoundland should have the head very large and massive; skull flat; muzzle square; ears small, lying close to the head; legs straight; feet large; soles strong and well padded. The coat should be straight and dense; tail flagged, carried gaily, but not curled over, and the colour black, with sometimes a white star on the chest. The regulation size is from 27 inches at the shoulder and upwards; and the average weight 100 pounds for dogs and 85 pounds for bitches.

Pekingese.—The most ancient of all toy dogs is the Pekingese, which, tradition says, has existed in China for upwards of two thousand years, and has certainly been jealously preserved by the Chinese Imperial Court for many centuries. The first introduction of the breed to Britain was a result of the sacking of the Summer Palace in Peking in 1860, when four of these tiny Imperial pets were discovered on the flight of the Court, and brought to England by Lieutenant (afterwards General Sir J. H.) Dunne and Lieutenant (afterwards Admiral) Lord John Hay. Of these one was presented to Queen Victoria, and lived for ten years; and two others were given to the late Duchess of Richmond and Gordon, and founded

the present well-known Goodwood strain. The standard of points is as follows:—Head massive: broad skull, wide and flat between the ears (not dome-shaped), wide between the eyes; nose black, broad, very short, and flat; eyes large, dark, prominent, round, and lustrous: stop deep; ears heart-shaped, not set too high, leather never long enough to come below the muzzle, not carried erect, but rather drooping, long feather; muzzle very short and broad, not underhung nor pointed, wrinkled; mane profuse, extending beyond shoulder-blades, forming ruff or frill round front of neck; body heavy in front, broad chest, falling away lighter behind, lion-like, not too long in the body; coat long, with thick undercoat, straight and



Fig. 528.—1, Pointer. 2, Retriever (flat-coated). 3, Retriever (curly-coated).

flat, not curly nor wavy, rather coarse, but soft; feather on thighs, legs, tail, and toes long and profuse. Colour: All colours are allowable; red, fawn, black, black-and-tan, sable, brindle, white, and particoloured; black masks and spectacles round eyes, with line to ears, desirable. Legs short; fore-legs heavy, bowed out at elbows; hind-legs lighter, but firm and well shaped. Feet flat, not round, should stand well up on toes, not on ankles; tail curled, and carried well up on loins, long, profuse, straight feather. Size: The smaller the better, provided type and points are not sacrificed. Action free, strong, and high; crossing feet or throwing them out should not take off marks. Weakness of joints should be penalized.

Pointer.—Pointers are divided into three classes—large, medium, and small—according to weight. For the large, the standard is 70 pounds; for the medium, 50 to 70; and for the small, under 50. The chief points are as follows:—Skull wide between the ears; head long from the eye to the

nose; nose broad and square; eyes light or dark according to the general colour of the dog; ears fine, set on low, and clinging flat to the sides of head; neck long, sloping and gracefully arched; shoulders deep; chest fairly wide; body powerful and well ribbed; fore-legs straight and muscular, set in well under the dog; feet round and compact; tail broad at the base, tapering to a fine point. Colours various, lemon-and-white, black, and liver-and-white. The last is generally considered to accompany greater endurance.

Pomeranian.—For the pomeranian, the points, as given by the Pomeranian Club, are as follow:—In general build, short-coupled, well-knit, head foxy in outline, ears small and carried perfectly erect, and his tail curled up from the root lightly over his back, or lying flat on the back. He must be a compact little dog, well proportioned in build, standing on straight limbs, and possessing a profuse coat of long and perfectly straight silky hair all over his body, forming a mane round his neck of longer hair, with the fore-legs feathered, and the thighs more heavily feathered. He must be sharp and intelligent in expression, and exhibit great activity and buoyancy of disposition. Weight for pomeranians, over 7 pounds; for pomeranians - miniature, under 7 pounds. Colours: White, black, blue, brown, sable, shaded-sable, red, orange, fawn, and parti-colours. There must be no white hairs in the black, the white variety must be free from any tinge of lemon.

Poodle.—The following are the points for the poodle:—Head long, straight, and fine; skull rather narrow and peaked at back; jaw long, strong, and fine; teeth white and level; lips black and rather tight-fitting; nose black and sharp; eyes almond-shaped, very dark brown, and full of fire and intelligence; ears, the leather long and wide, hanging close to the face; neck of fair length; shoulders strong and muscular; back short, strong, and slightly curved; legs well set, straight from shoulders, with plenty of bone and muscle; feet small and round; pads thick and hard; tail set on rather high, and well carried, never curled or carried over the back. The coat is very profuse, and is of two kinds—corded and uncorded. If corded, it hangs in light, even cords; if uncorded, it is very thick and strong, and it must be of even length and free from knots. The hair is of a woolly texture. In colour, no mixture of any kind is admissible.

Pug.—The pug should have the head round and very large in proportion to the body; muzzle short and very broad; face cushioned and square; eyes large, dark, and set wide apart; ears small and thin, well set forward on face; mask and ears black. The head should be heavily wrinkled; neck short, thick, and muscular, with plenty of loose skin; body thick and square, with a black line along the centre of the back; legs short, straight, and strong; feet firm and well arched; tail curled tightly on hip, double or triple curl being considered correct. The coat should be short, soft, and glossy, but not woolly. Colour, fawn or black. Size, from 10 to 15 pounds. Small pugs are much preferred.

Retriever.—The retriever is a favourite dog on account of its sagacity and pluck. There are several kinds—the black curly-coated, the flat-coated, and the liver-coated, the first being taller and heavier than the other two. The general characteristics are as follows:—Head long; skull wide; ears small, close to the head, and generally covered with soft, glossy hair; eyes brown or hazel, very bright and expressive, showing great intelligence; jaws long and level; muzzle large, with full open nostrils; neck long but muscular; chest deep; shoulders strong and set obliquely; body long, with muscular loins; stifles fairly well bent; feet round and well arched; fore-legs straight, strong, and feathered. The coat should be close, long, and glossy, and the tail carried down. Colour, a beautiful jet black. No trace of white anywhere. White specimens are sometimes met with, but these are exceedingly rare.

Sheepdog, Old English.—The general appearance of the Old English sheepdog is one of strong compactness, with great symmetry, absolutely free of legginess or “weazleness”, profusely coated all over, very elastic in its gallop, but in walking or trotting he has a characteristic ambling or pacing movement, and his bark should be loud, with a peculiar “*pot cassé*” ring in it. A thick-set, muscular, able-bodied dog, with a most intelligent expression, free from all poodle or deerhound character. Skull should be capacious, rather squarely formed, giving plenty of room for brain power; the parts over the eyes well arched, and the whole well covered with hair. Jaws fairly long, strong, square, and truncated; the stop defined; eyes vary according to colour of dog, but dark or wall-eyes are to be preferred; nose always black, large, and capacious; teeth strong and large, evenly placed, and level in opposition; ears small, and carried flat to side of head, coated moderately; fore-legs dead straight, with plenty of bone; body a medium height from the ground, without legginess, well coated all round; feet small, round; toes well arched; pads thick and hard; tail docked to $1\frac{1}{2}$ to 2 inches; neck fairly long, arched gracefully, and well coated with hair; shoulders sloping and narrow at the points, the dog standing lower at the shoulder than at the loin; body rather short, very compact; ribs well sprung, and brisket deep and capacious; loin very stout and gently arched; hind-quarters round and muscular, with well-let-down hocks, the hams densely covered with a long thick jacket in excess of any other part; coat profuse, and of good hard texture, not straight, but shaggy, and free from curl; undercoat should be a waterproof pile. Colour: Any shade of grey, grizzle, blue, or blue-merled, with or without white markings; any shade of brown or sable distinctly objectionable. Height: 22 inches and upwards for dogs, slightly less for bitches. Type and character and symmetry are of the greatest importance, and on no account to be sacrificed to size alone.

St. Bernard.—There are two varieties of St. Bernards—the one rough-coated and the other smooth. They are not, however, distinct breeds. The chief points are:—Head very massive and large, showing great depth from eye to lower jaw; muzzle broad and square; lips hanging and loose;

eyes dark in colour, very mild; ears small, lying well to the cheek; nose black, wide, and deep; legs very straight and of extraordinary strength, with great bone and muscle; feet large and compact; body long, broad, and straight, combined with perfect symmetry. The coat in the smooth variety should be close, thick, and lie close; in the rough-haired, dense and flat, of fair length, not woolly. Colour, red and white, orange and white, or brindle with white on chest and legs, a white collar, white blaze up face; or the body may be white with patches of the colours named. As regards size and weight, a St. Bernard should be as tall and as heavy as a mastiff.

Schipperke.—The Belgian schipperke is an excellent and faithful little watch-dog, who does not readily make friends with strangers. He is very active, always on the alert, very courageous in defending objects left in his charge, but also gentle with children. He is also exceedingly inquisitive, a characteristic peculiarity, taking the liveliest interest in everything going on about him. He is very game, and a good vermin dog. Colour, self-coloured, black; head foxy; nose small; eyes dark brown, small, oval rather than round, neither deep-set nor prominent, lively and keen; ears quite erect, small, triangular, and set on high, of sufficient substance that they cannot be folded otherwise than lengthways, and very mobile; teeth very white, strong, and quite level; neck strong, full, and carried upright; shoulders sloping and with easy action; chest broad in front and well let down; back straight but supple; loins broad and powerful; fore-legs quite straight, fine, and well under the body; feet small, round, and well knuckled up, nails straight, strong, and short; thighs powerful, very muscular, and hocks well let down; body short and thick-set, the ribs well sprung, rather drawn up in loin; tail absent; coat dense and harsh, smooth on the ears, short on the head, the front of the fore-legs and the hocks, and also rather short on the body, but profuse round the neck, commencing from behind the ears, forming a mane and a frill on the chest. The back of the thighs is feathered, forming the *culotte*, the fringe of which is turned inwards. Weight: Maximum for the small size, 12 pounds; for the large size, 20 pounds. Faults: Light-coloured eye; ears semi-erect, too long or rounded; head narrow and elongated, or too short; coat sparse, wavy, or silky; absence of the mane and *culotte*, coat too long; white spots; under-shot mouth.

Setter, Black-and-tan.—Black-and-tan setters were formerly known as Gordon setters, because the breed was connected with the Gordon Castle kennels. This variety is heavier than the English or Irish kind, showing more of the hound and less of the spaniel. In general appearance the body is the same, but the head is stronger, muzzle broader, lips much heavier, ears long, and the coat not so fine in texture. In colour, the black should be even in hue, and the tan a rich mahogany red; the feathering of fore-legs and thighs should be tan, not black.

Setter, English.—The English setter should have a long and narrow head; muzzle long, square, and clean; nose large, with wide nostrils; ears

lobe-shaped, set on low, of moderate length, fitting close to the head; eyes soft and intelligent, moderately large; neck fairly long and muscular; shoulders sloping; chest deep; back strong and muscular; loin broad and powerful; thighs well developed; stifles well bent; fore-legs straight and well feathered; feet close and compact, feathered between the toes; coat abundant, soft, and wavy, free from curl. The colour may be of any shade, except red or black-and-tan.

Setter, Irish.—The Irish setter is of a lighter build, and is more graceful in form than the English variety. Head long and narrow; muzzle square; ears fine, set low and lying well back; nose and eyes a rich hazel,

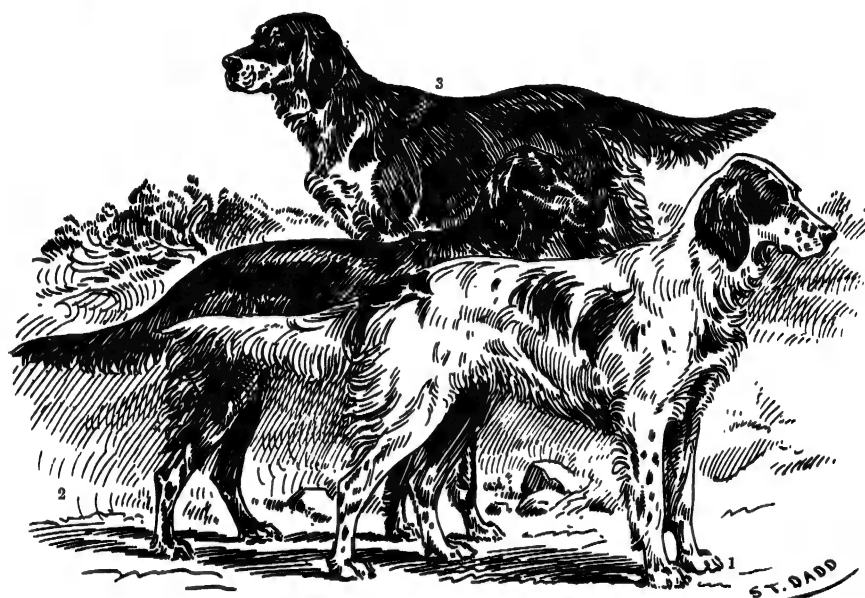


Fig. 529.—Setters. 1, English. 2, Irish. 3, Black-and-tan.

the latter very soft and expressive; shoulders clean; chest deep; loin broad and muscular; coat very fine, of a rich, dark red, with a golden tinge. There should be no black or white, except perhaps a small star on head or chest.

Spaniel, Clumber.—The Clumber spaniel is a large, low, heavy, massive dog, with immense bone, and large head and forehead. Brows heavy, and eyes deeply set; muzzle well developed and very square, with a fair quantity of lip; ears small when compared with the size of the dog, and vine-shaped, hanging close to the face. The colour should not be red-and-white, but lemon-and-white, the latter predominant.

Spaniel, Cocker.—The general appearance of the cocker spaniel should be a concentration of type, pure blood, sagacity, docility, good temper, affection, and activity. Head not so heavy in proportion nor so high in occiput as in modern field spaniels, with nicely developed muzzle or jaw; lean but not snipy, and yet not square as in Clumber or Sussex varieties,

but always with sufficiently wide and well-developed nose; forehead perfectly smooth, rising without too decided a stop from muzzle into a comparatively wide and rounded well-developed skull, with plenty of room for brain power; eyes full but not prominent, hazel or brown-coloured, with a general expression of intelligence and gentleness, though decidedly wide-awake, bright and merry, never goggled nor weak; ears set on low, leather fine, and not extending beyond the nose, well clothed with long, silky hair, which must be straight or wavy, no positive curls or ringlets; neck strong and muscular, and neatly set on to fine sloping shoulders; body not quite so long and low as in the other breeds of spaniels, more compact and firmly



Fig. 530.—Spaniels. 1, Field. 2, Clumber. 3, English Water.

knit together, giving the impression of a concentration of power and untiring activity; total weight should not exceed 25 pounds; nose sufficiently wide and well developed to ensure the exquisite scenting powers of this breed; colour black; shoulders sloping and fine; chest deep and well developed, but not too wide and round to interfere with the free action of the fore-legs; back and loin immensely strong and compact in proportion to size and weight of dog, slightly drooping towards tail; hind-quarters wide, well rounded, and very muscular, so as to ensure untiring action and propelling power; stern set low, but permitted a slightly higher carriage than in other breeds, never cocked up over back, but rather in a line with it, the lower in action and carriage the better: when the dog is at work the action should be incessant; legs must be well boned, feathered, and straight, sufficiently short for concentrated power, but not so as to interfere with full activity; feet firm, round, and catlike, not too large, spreading, or loosely jointed; coat flat or waved, silky in texture,

never wiry, woolly, nor curly, with sufficient feather, waved or setter-like, not too profuse. Colour jet black; a white shirt frill should never disqualify, but white feet not allowed in any specimen of self-colour. Other colours, black-and-tan, liver-and-tan, liver, black-tan-and-white, lemon-and-white roans, and almost any combination of colour.

Spaniel, English Water.—The English water-spaniel is a fairly big dog, with plenty of bone and muscle. Head long; muzzle well developed; ears long and bulky; coat closely curled, but not matted. A young dog may be taught to retrieve well, to work in silence, and act by signs.

Spaniel, Field.—The points of the field spaniel should be:—Head long and lean, with a good length of muzzle, which must not be snipy, a short, coarse, and chumpy head being most objectionable. Eyes dark: ears set very low down, narrow where they leave the head, and long and lobe-shaped; body large, deep, long, and low; tail carried below the level of the back; legs straight, strong, short, and very large in bone; colour: black is the most fashionable, but the black-and-tan, liver-and-tan, liver-and-white, and pied specimens are very beautiful. Any resemblance in shape, action, or movement to the basset hound or dachshund is regarded as a fault.

Spaniel, King Charles.—This breed originally came from Spain, about the time of Charles I.; hence the name. The four colour varieties of this breed are: Black-and-tan, tricolours, ruby or red, red-and-white or Blenheim. The characteristic points are as follows:—The skull large, either round or domed; muzzle short, blunt, and well turned up; eyes large, liquid, and bulging; ears long and well feathered; neck of fair length; back short and compact; fore-legs short and quite straight; feet large; tail carried horizontally; coat very profuse, soft, silky, and free from curl. Its weight should be from 7 to 10 pounds.

Terrier, Airedale or Waterside.—Airedale terriers are rough-coated and shapely. Head long, with skull broad and flat, narrowing to the eyes, but without wrinkle; jaw deep and strong; ears V-shaped; eyes small and dark, full of expression; neck of moderate length and thickness; chest deep, and of fair width; back short, strong, and straight; legs perfectly straight, with plenty of bone; feet small and round; coat should be hard and wiry; hair abundant, lying straight and close; the colour light orange, the upper portions of the body a dark gray. In weight they should be about 40 to 45 pounds.

Terrier, Bedlington.—The Bedlington terrier is a lightly-made-up dog, lathy in appearance, but not shelly. Skull narrow but deep and rounded, high at occiput, and covered with a silky tuft or top-knot. Jaw long, tapering, sharp, and muscular, as little stop as possible between the eyes, so as to form nearly a line from the nose end to the occiput; lips close-fitting, and no flew. Eyes small and well sunk in head; the blues should have a dark eye, as should have the blue-and-tans, with amber shades; livers and sandies a light-brown eye. Nose large, well angled; blues and blue-and-tans should have black noses; livers and sandies, flesh-coloured. Teeth, level or pincer-jawed. Ears moderately large, well-formed, flat to the

cheek, thinly covered and tipped with fine silky hair; they should be filbert-shaped. Legs of moderate length, not wide apart, straight and square set, with good-sized feet, which are rather long; tail thick at root, tapering to point, slightly feathered on lower side; 9 to 11 inches long, and scimitar-shaped. Neck long, deep at base, rising well from shoulders, which should be flat. Body long and well proportioned, flat-ribbed, and deep, not wide in chest, slightly arched back, well ribbed up, with light quarters; coat hard, with close bottom, and not lying flat to the sides. Colour dark blue, blue-and-tan, liver, liver-and-tan, sandy, sandy-and-tan. Height about 15 or 16 inches. Weight, dogs about 24 pounds; bitches about 22 pounds.

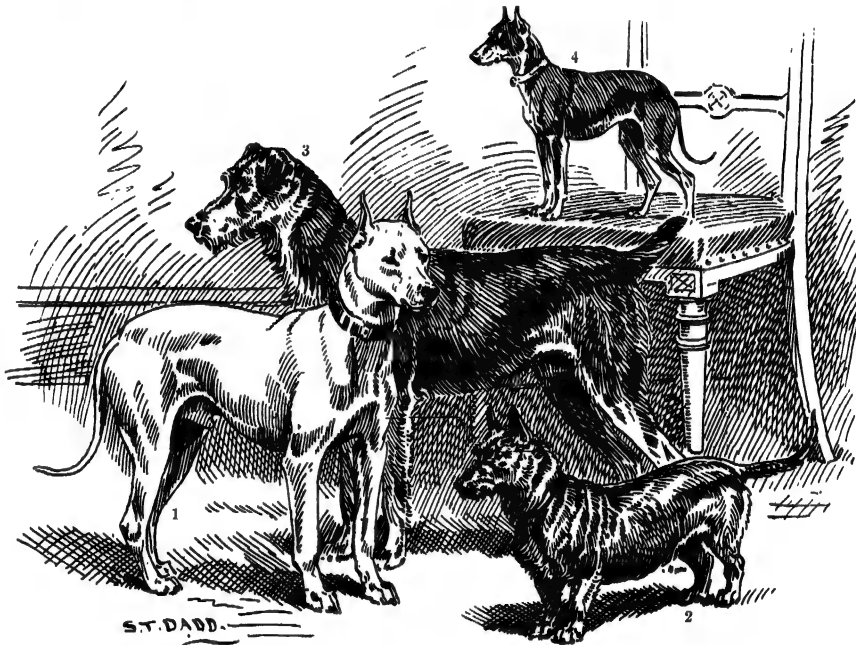


Fig. 581.—Terriers. 1, Bull. 2, Scotch. 3, Airedale. 4, Black-and-tan.

Terrier, Black-and-Tan.—Black-and-tan terriers are sometimes known as Manchester terriers. The points are:—Head long and narrow; eyes small, black, and bright; ears small and thin, set close together at the top of the head; neck slim and graceful; shoulders sloping; chest narrow between the legs; legs perfectly straight, strong, and of proportionate length; feet compact, split between the toes; tail very fine, and carried straight; colour, black, with tan marks along the jaws. This tan should be rich, and should meet the black abruptly. Spots and pencillings occur over the eye, and about the toes. The weight of a black-and-tan toy should not be more than 7 pounds. There is, however, a larger variety, scaling as much as 22 pounds.

Terrier, Bull.—The points are:—Head long, level from skull to head of nose; strong jaw and level mouth; small dark eyes, not too prominent; broad

chest; short body; fore-legs with plenty of bone and muscle, of medium length; strong and well-arched feet: hind-legs well hocked, showing great strength; tail fine and straight, carried in line with back. Pure white is considered the best colour, but there are many brindled and patched dogs.

Terrier, Clydesdale.—In general appearance a long, low, level dog, with heavily fringed, erect ears, and a long coat like the finest silk or spun glass, which hangs quite straight and evenly down each side, a parting extending from the nose to the root of the tail. Head fairly long; skull flat, and very narrow between the ears, gradually widening towards the eyes and tapering very slightly to the nose, which must be black; jaws strong and teeth level; eyes medium in size, dark in colour, not prominent, with sharp, terrier-like expression; eyelids black; ears small, set very high on the top of the head, carried perfectly erect, and covered with long silky hair, hanging in a heavy fringe down the sides of the head; body long, deep in chest, well ribbed up, the back perfectly level; tail perfectly straight, carried almost level with the back, and heavily feathered; legs as short and straight as possible, well set under the body, and entirely covered with silky hair; feet round and catlike; coat as long and straight as possible, free from all trace of curl or waviness, very glossy and silky in texture, with an entire absence of undercoat. Colour, a level, bright, steel blue, extending from the back of the head to the root of the tail, and on no account intermingled with any fawn, light, or dark hairs. Head, legs, and feet should be a clear, bright, golden tan, free from any gray, sooty, or dark hairs. The tail should be very dark blue or black.

Terrier, English White.—This variety of terrier has been declining in popularity for some time. It is somewhat like a small bull terrier, with a weight of 6 to 14 pounds. A perfect specimen is pure white throughout; nose black; eyes dark hazel. The tapering tail should be carried straight, without curve. The ears are drop. The coat is close, short, and glossy. The English white terrier is difficult to breed true to colour, coloured markings being very apt to appear. It is supposed to show signs of crossing with the Italian greyhound.

Terrier, Fox.—There are two kinds of fox-terriers—the smooth and the wire-haired. The points of the smooth fox-terrier are:—Head narrow, and rather long; jaws strong and level; nose black; eyes dark; ears small and shaped, and carried close to the cheeks; neck slightly arched; chest narrow, and rather deep; back short, straight, and strong; legs straight; feet round, not too large, but very compact; coat smooth, short, hard, and dense. White should predominate; liver or brindle markings are objectionable. The terrier generally ought not to be leggy, nor too short in the leg, but bone and strength are essential.

The wire-haired fox-terriers differ only in the coat, which should be very dense and wiry, about 2 inches in length.

Terrier, Irish.—Head long and narrow, skull flat; eyes small and dark; ears small and V-shaped, set well upon the head; nose black; teeth strong and level; neck of fair length; legs straight and strong; feet round and

thick; back strong and thick; tail set rather high; coat very hard, wiry, and straight; colour yellowish red, darker on ears. All Irish terriers are a bright red.

Terrier, Maltese.—The Maltese terrier has really no distinguishing marks of the terrier about it. It is the oldest of our toy dogs. The head is so buried in hair that its shape is not easily manifest. Ears moderately long; nose black; body long; tail of good length, well feathered, and bent upwards over the back. The skin is of a pink colour. The coat should be fine in texture; hair silky, straight, and long; in first-class specimens it should sweep the ground. Colour of coat white. Weight ought not to exceed 6 pounds.

Terrier, Scotch or Aberdeen.—Skull long, and slightly domed; muzzle powerful; nose black, and of large size; eyes dark brown, very bright and piercing; ears small, prick or half-prick, never drooping; neck short and thick; body of moderate length; legs short, with plenty of bone; feet strong, small, and covered with short hair; tail carried with slight bend; coat short, hard, wiry, and very dense; colour black, sandy, steel or iron gray, brindle or grizzled, no white markings. Weight about 14 pounds.

Terrier, Skye.—Head long, with strong jaws; teeth also strong and level; eyes hazel; muzzle always black; ears prick or pendent, and when prick not large, but standing well up, or when pendent, larger and hanging straight; body very long and low; neck muscular and strong; tail short, and carried straight; legs short, straight, and strong; feet large, and pointing forward; coat double—the under-coat short, close, soft, and woolly, the over-coat straight, hard, and wiry, about 5½ inches in length. Colour dark or light blue, gray, or fawn, with black points.

Terrier, Welsh.—The following is the type adopted by the Welsh Terrier Club:—Head: skull should be flat, rather wider between the ears than the wire-haired fox-terrier; jaw powerful, clean-cut, rather deeper and more punishing, giving the head a more masculine appearance than that usually seen on a fox-terrier; stop not too defined, fair length from stop to end of nose, which should be black; ears V-shaped, small, not too thin, set on fairly high, carried forward and close to cheek; eyes small, not deeply set in nor protruding out of skull, dark hazel, expressive, and indicating abundant pluck; neck of moderate length and thickness, slightly arched, and sloping gracefully into shoulders. Body short, well ribbed up; loin strong, good depth, and moderate width of chest; shoulders long, sloping, and well set back; hind-quarters strong, thighs muscular, and of good length; hocks moderately straight, well let down, and fair amount of bone; stern set on moderately high, but not too gaily carried. Legs should be straight and muscular, possessing a fair amount of bone, with upright and powerful pasterns; feet should be small, round, and catlike. Coat wiry, hard, very close and abundant. Colour black-and-tan, or black-grizzle-and-tan, free from black pencilling on toes. Size: Height at shoulder, 15 inches for dogs; bitches proportionately less. Weight about 20 pounds.

Terrier, West Highland White.—This is an old breed, well known

in James I.'s time, which differs essentially from the modern Scottish (or Aberdeen) terrier in type. He is a small, sporting, and extremely active dog, with indomitable pluck and tenacity in his legitimate work, for which he is still extensively used in the Highlands—pursuing foxes and otters among the rocks and boulders, where want of activity would mean death. Head not too long, with strong cheek muscles governing the powerful jaw; all heaviness of fore-face and muzzle to be discouraged, as lessening quickness of grip. Teeth very large for size of dog; ears small, erect, terminating in sharp point; eyes of medium size, dark, and set well apart; nose jet black; neck long and muscular; shoulders well sloped; body compact and deep; legs short, strong, and straight; hind-quarters and loins very strong; tail short and as straight as possible. Coat harsh, to keep off rain, with under-coat thick and furry for warmth. Colour white. Weight: Dogs not over 18 pounds; bitches under 16 pounds.

Terrier, Yorkshire.—Head moderately long, and wedge-shaped; muzzle tapering; eyes very keen and intelligent; ears V-shaped and semi-erect; nose jet black; teeth level; body short and compact; legs straight, and well-tanned; coat extremely long, with hair fine and glossy as silk, almost hiding the face; along the body it is parted in the centre of back, so that it hangs nearly to the ground on both sides. Colour on the body, steel blue, free from black or tan hairs; the tail should be feathered with dark-blue hair; the hair on the forehead should be of a light golden shade; while on the neck there should be a streak of rich bright tan. Size varies considerably. The correct weight is 5 or 6 pounds.

Whippet.—The whippet is a kind of small greyhound with a mixture of terrier blood. It is most common in the north of England, but has now become a favourite sporting dog with working men in other parts of the country also. It is used for racing or for coursing rabbits. The colour is black, white, brindle, fawn, and a mixture. It is a rather delicate variety of dog.

Wolfhound, Irish.—The original Irish wolfhound, which has long been extinct, is supposed to have had some kinship with the Scotch deerhound or the Great Dane. The modern Irish wolfhound is noted for its strength, stature, fleetness, agility, and intelligence. Coat hard and rough; face bearded; ears pricked at the roots; good neck; muscular shoulders; large cat-like feet; tail carried rather upward; colour various.

Wolfhound, Russian, or Borzoi.—Head, long and lean; skull flat and narrow; stop not perceptible, muzzle long and tapering. The head from the forehead to the tip of the nose should be so fine that the shape and direction of the bones and principal veins can be seen clearly; profile should appear rather Roman-nosed. Bitches should be even narrower in head than dogs. Eyes dark, expressive, almond-shaped, and not too far apart; ears like those of greyhound, small, thin, and placed well back on the head, with the tips, when thrown back, almost touching behind the occiput. The head should be carried somewhat low, with

the neck continuing the line of the back. Shoulders clean and sloping well back; chest deep and somewhat narrow; back rather bony, and free from any cavity in the spinal column, the arch in the back being more marked in the dog than in the bitch; loins broad and very powerful, with plenty of muscular development; thighs long and well developed, with good second thigh; ribs slightly sprung at the angle of ribs, deep, reaching to elbow, or even lower; fore-legs lean and straight, seen from front should be narrow, and from side, broad at shoulders, narrowing gradually down to the foot, the bone appearing flat, and not round as in the foxhound. Hind-legs a trifle under the body when standing still, not straight, and the stifle slightly bent; muscles well distributed and highly developed; pasterns strong; feet like those of deerhound, rather long, toes close together, and well arched; coat long, silky (not woolly), either flat, wavy, or rather curly. On head, ears, and front legs it should be short and smooth; on neck the frill should be profuse and rather curly; on chest and rest of body, tail, and hind-quarters, it should be long; fore-legs should be well feathered; tail long, well feathered, and not gaily carried. Height at shoulder: Dogs, from 29 inches upwards; bitches from 27 inches upwards. Faults: Head short or thick, too much stop, parti-coloured nose, eyes too wide apart, heavy ears, heavy shoulders, wide chest, "barrel" ribs, dew claws, elbows turned out, wide behind.

GENERAL MANAGEMENT OF DOGS.

For a dog that lives out of doors, a kennel is of course essential, and even for one that sleeps in the house it is best to have some definite place—a box or basket placed out of the way of draughts—to which it can retire for the night.

Kennels.—A kennel for ordinary use should have an outside floor slightly sloping, to enable the dog to recline when on chain. This floor should be so made that it may be removed at will. The roof should of course be water-tight. Unless it can be removed, one of the sides should be hinged for cleaning purposes, and also to allow of thorough airing. The kennel should have plenty of clean straw, as most dogs kept out of doors delight to nestle down amongst their bedding, especially during cold weather. If hay is used, it should be sprinkled with disinfectant occasionally, as it is apt to harbour insects. By means of short legs placed at each corner, or two thick boards placed underneath, the kennel may be kept free from damp which is likely to rise from the ground.

Bedding.—The kind of bedding used should depend upon the breed of dog kept. If Yorkshires, terriers, and poodles sleep on straw, their coats often suffer, but all short-haired dogs delight in it. As a summer bedding wheat straw forms an excellent lair, as does also saw-dust where the bench is properly constructed to carry it, but in winter oat straw is better. Many other materials are often used, but all things considered, straw is by far the best as a winter bedding.

Feeding Dogs.—A dog's meals should be given regularly, and the diet should be varied. It is a mistake to feed a dog always upon plain biscuit on the plea of preventing undue fatness. The dog is carnivorous, and for this reason should receive a certain allowance of meat as well as vegetables, varied with biscuits, rice, or bread, and occasionally fish. The quantity of meat requires, of course, to be regulated by the amount of exercise. Flesh food and idleness are the worst enemies of the domesticated dog. The ordinary dog biscuits are easily digested and for some dogs may be made the staple food, but care must be taken that the best are obtained, for inferior and improperly-made articles are offered for sale, having the meat only on the surface instead of its being incorporated with the farinaceous material of which the biscuit is mainly composed.

Very many dogs, however, get tired of biscuits, and, even when hungry, often refuse them whether given dry or soaked. In such cases the diet should be changed at once. One way of doing this is to make some broth or melt a little fat so as to cover the broken biscuit. Green vegetables, also, may be mixed with the food, as they help to keep the blood pure. Oatmeal porridge, with scraps from the table or with a little gravy, forms an excellent change.

Above all, pure water must be constantly at hand. Should the dog be chained for any length of time, let him have a bone; this will occupy as well as delight him.

Exercise.—Robust health without exercise is an impossible condition, both in respect to man and animals, and although idleness is not altogether inconsistent with the absence of active disease, it frequently participates in its development, and in no domestic animal is this the case more than in the dog. The life of indolence and ease permitted to many of our canine pets, combined as it generally is with luxurious living, is the direct cause of the most abiding and fatal ailments. The effect of muscular exercise is to increase the activity of the circulation, and by so doing to cause an abundant supply and frequent renewal of blood to the organs and tissues of the body. At the same time respiration is quickened, oxygen imbues the system, and by it the waste products of nutrition are burnt up into a condition in which they are capable of being removed, instead of accumulating in the body to impair and poison it. It is impossible to lay down any fixed rule as to the amount of exercise to be enforced. This will depend upon considerations as to age, the presence or absence of physical infirmity, constitution, &c.; but it may be said that adult animals in good bodily health should be compelled to take at least two hours' exercise daily—an hour in the morning and another in the afternoon. Leading dogs in chains is not the kind of activity here contemplated. They should be allowed their freedom to gallop and romp at their will, and be induced to do so by chasing a ball or stick, hunting a hedgerow, or by some other means of encouragement.

When considering exercise, some regard must be paid to feeding, and it should be a rule that the former be not allowed too soon after the latter.

In order to secure the full benefit which exercise confers on health, it must be systematically carried out, and regulated with due regard to age, constitution, and "condition". The dog, like the athlete, acquires muscular strength, robust health, and powers of endurance in proportion as the latter is developed.

GENERAL TREATMENT IN HEALTH.

Most dogs require washing, but if hard-haired dogs are subjected to too much of it, the coat is apt to soften. No more washing should be done than is absolutely necessary for cleanliness. Saw-dust will be found useful, and of great cleansing power. For white dogs periodical washing is indispensable. If the dog is very seldom washed, it should be well groomed as often as possible. This frees the coat of fleas and other parasites, besides keeping the skin in a healthy condition. Brush the dog in the direction of the lay of the hair, never immediately after a meal, but at the close of the day after exercise.

THE DOG IN SICKNESS.

The dog owner cannot, of course, be expected to diagnose every disease, but he should be able to recognize common ailments, and know how to deal with them, at least in the earlier stages. The list of ailments to which dogs are liable is a formidable one. Only the most common are mentioned here.

When a dog seems out of sorts, he should be at once removed from his fellows, for not only are quietness and comfort required for his restoration to health, but isolation may be the means of preventing the spread of contagion.

Asthma is a spasmodic condition of the bronchial tubes, more especially affecting old dogs which have been over-fed and allowed to lead a life of indolence. It comes on suddenly, and may pass away in a short time, to return again when provoked, and ultimately establishes itself as a continuous disease, varying in severity from time to time. Its chief symptom is a laboured and gasping breathing, in which the belly is forcibly drawn up with each expiration, while with each inspiration the nostrils are widely distended and the mouth opened.

It has its origin in a number and variety of causes not very apparent to the common observer.

Dogs so affected should receive a dose of castor-oil at the onset of the attack. Their diet should consist of milk and eggs or soup, with oatmeal or beef-tea, and brown bread, with either of which a little fish may be given.

The warmth of the skin should be maintained by rugs, and the patient should not be exposed to wet, or to cold winds, or to the extreme heat of a fire.

Canker of the Ear.—In this disease the lining membrane of the ear

is inflamed, and sometimes exhibits an eruption of small red pimples, and in bad cases, much thickening and ulceration of the part. Its presence is indicated by the dog frequently scratching the ear, shaking the head, and maybe carrying it on one side. A dark, dirty-looking discharge, from which an offensive odour is emitted, accumulates in the passage, and the outer skin of the ear is rendered sore by the constant scratching it undergoes.

Overfeeding, especially with an excess of flesh food, is the chief cause of the disease. It is also provoked by the frequent entrance of water into the ears, as in water-dogs, and the irritation caused by the accumulation of ear-wax. In other instances it forms part of a more or less general attack of eczema.

Treatment will consist in the administration of a dose of castor-oil every week or ten days, so long as the disease continues. The ears should be thoroughly cleansed with warm water twice a day, and then injected with a weak solution of carbolic acid, or sulphate of zinc, or alum: or each of these may be employed in succession.

A spare diet is most essential, and it is important that it be given in small quantities through the day. Plain biscuits, vegetables, and a little gravy, with which a few grains of carbonate of soda and a little malt flour are mixed, will form a suitable diet.

Chorea.—St. Vitus's Dance is a disease of the nervous system, characterized by sudden and involuntary contraction or twitching of the voluntary muscles.

With few exceptions, it is confined to young dogs between six months and two years old. It usually arises as a complication, or follows upon an attack of distemper. Less frequently it is due to intestinal parasites, and occasionally it is seen in young bitches as the result of excessive suckling.

When following distemper, chorea almost invariably assumes a chronic form.

The presence of chorea is made known by repeated jerky or spasmodic movements taking place in different parts of the body. It may be one fore-limb, or the head, or one hind-limb, or one side of the body, or the spasm may affect the entire trunk. It is sometimes so slight and restricted as to be for a time overlooked. In the severer cases the affected limb or part is seldom at rest, one jerk or spasm following another in rapid succession. It is only when the animal is asleep that the twitching ceases. There does not appear to be any acute suffering in chorea, and it is only in the worst cases that the general health suffers. Here the constant agitation and unrest lead to wasting and weakness, which may end in paralysis.

The treatment of chorea is seldom attended with satisfactory results, and especially in those cases following distemper. Where it is traceable to worms, removal of the parasites by a dose or two of vermifuge medicine, and subsequent good living, may arrest its progress. In those cases which occur in bitches when nursing, the puppies should be transferred to

a foster-mother, and the general health of the dam built up again by a generous allowance of good food, small repeated doses of citrate of iron and port-wine, gentle exercise, and care.

Cough.—This is not a disease, but may be produced by various causes, such as worms, catarrh, inflammation of the lungs, or sudden changes of temperature, producing cold and thereby affecting the respiratory organs. If the throat appears to be sore, soak a piece of flannel in hot water and place upon it a little turpentine liniment, binding it round the animal's throat.

Cramp.—Cramp is the result of over-exertion or exposure to damp. It usually attacks the hind-quarters. Place the dog in a hot bath for a short time, dry him well, and rub the parts affected briskly with the hand. Then apply a little soap liniment.

Diarrhœa.—Diarrhœa is another common ailment, generally due to injudicious feeding, or worms. In the latter case, see the treatment recommended for worms. In either case, a dose of castor-oil should be given. The diet should receive particular attention. It should consist solely of boiled rice, or corn-flour made into milk-puddings. If this simple treatment should not bring about recovery, a small dose of chlorodyne or of chalk mixture should be administered two or three times a day according to circumstances.

Distemper.—It used to be supposed that every dog must sooner or later have distemper, just as every child was expected to have measles or mumps or whooping-cough. As the result of this fallacy no precautions were taken to guard against infection, and in consequence the disease was at one time almost universal. Now that the malady is known to be contagious, it is recognized that no dog can contract it which is kept away from infected sources; not merely from other animals actually suffering from distemper, but also from places which they have occupied and things with which they have been brought into contact, as bedding, brushes, clothing, feeding utensils, &c. If danger is suspected, disinfectants should be used at once, and cleanliness in every respect should be strictly observed.

The most common form of distemper is the catarrhal, often mistaken in its early stages for an ordinary cold. Among the symptoms are fever, refusal of food, retching, vomiting, loss of flesh, a discharge from the eyes and nose, and sometimes, in severe cases, fits. A dog exhibiting these symptoms should be isolated at once, and a veterinary surgeon should be consulted.

In the case of milder attacks, simple remedies and common-sense treatment will effect a cure. The diet must be light and nutritious, such as meat-juice, milk, and mutton broth, poured over a small quantity of stale brown bread. Small repeated doses of port-wine or brandy will assist in upholding the strength, and when a slight improvement shows itself, minced lean beef may be given, and a little citrate of iron may be added to the wine.

Eczema.—This is an eruptive disease of the skin, mostly occurring in old dogs after a long period of luxurious living and obesity. It appears in the form of small red pimples, many of which are quickly resolved into minute vesicles or blisters, and discharge a sticky, watery, or matter-like fluid. It may be confined to the belly, elbows, or feet, or extend more or less over the entire body. It is attended with a good deal of irritation and scratching, by which the eruption is sometimes converted into extensive sores.

The chief cause of eczema is overfeeding and want of exercise. It is also induced by meat eaten in a state of decomposition, and by intestinal parasites.

Bitches during the period of lactation sometimes suffer from it, and it is a common result of chronic indigestion.

Dogs affected with eczema should be carefully fed. A diet of well-boiled oatmeal, with a little milk or gravy, or of ship-biscuits well soaked in boiling water and mixed with a good proportion of vegetable matter, forms the most suitable aliment. The skin should be thoroughly washed and dried at the outset, and the affected parts dressed with sulphur ointment, or zinc ointment, or a weak solution of oil of tar in glycerine. Where sores are produced by scratching they may be sprinkled over two or three times daily with dry sulphur. Where constipation exists, an aperient dose of Epsom salts now and again is desirable.

Epilepsy.—Epilepsy is a nervous disorder arising out of a morbid irritability of some part of the brain or spinal cord, or both. Owing to the sudden loss of consciousness, and convulsions, which mark its onset, it is usually spoken of as a fit. Puppies from three to twelve months old are most frequently its victims, although dogs of all ages are more or less liable to it.

The causes which give rise to epilepsy are many and various, but in the dog it most commonly appears as a complication of distemper, or as a result of the existence of parasites in the stomach or bowels.

Bitches when weakened and emaciated by protracted suckling, or by nursing a too large litter, sometimes suffer from it, and an attack may be provoked in susceptible subjects by fright, excitement, constipation of the bowels, and various forms of gastro-intestinal irritation. Epilepsy in its fitful character comes on suddenly, and mostly assumes a convulsive form. It varies in degree of severity in different cases, and also in the frequency and rapidity of its recurrence. In some the attack is very slight and transient, amounting to nothing more than a little unsteadiness of gait and muscular quivering, which is not repeated; while in others it assumes a most severe convulsive character, and recurs at longer or shorter intervals, sometimes with such rapidity as to form an almost continuous succession of attacks.

Epilepsy comes on without any warning; the dog suddenly loses consciousness, the muscles quiver, the eyes present a prominent staring appearance, the jaws are clenched, and he falls on his side. All the muscles of the

body are thrown into a state of spasm, the legs are extended in a rigid condition, or they are moved rapidly as in the act of running, the animal foams at the mouth, "champs" the jaws, the eyeballs roll from side to side, the breathing is hurried, and the entire frame is convulsed.

From this condition the dog may quickly rally, in which case the spasms subside, consciousness returns, the face wears a vacant stare, the animal rises to his feet, but moves with a weak, rolling gait, and shows marked signs of exhaustion. In some cases the fit is followed by epileptic mania, when, on rising, the patient rushes off at a gallop, foaming at the mouth, and after travelling some distance conceals himself in some out-house, hedgerow, or other secluded spot, until consciousness is re-established. It is in this stage of the disease that epilepsy is liable to be mistaken for rabies.

There is little to be done in the way of treatment during the fit, beyond sprinkling the face with cold water. To prevent the dog's escape it may be desirable to secure him with a rope or collar and chain. Where epilepsy results from worms, the dog should receive a dose or two of vermifuge medicine; and in all cases, save those arising out of distemper, a dose of aperient medicine now and again will be of service in warding off the attacks.

This disease differs from rabies by the suddenness with which it comes on, and the rapidity with which the animal recovers.

Jaundice.—Jaundice is marked by a yellow discoloration of the skin, the lining membrane of the eyelids, and the mouth; hence it is commonly termed "The Yellows". It is the result of an accumulation of bile in the blood, arising from various forms of disease of the liver. Besides the altered colour of the superficial parts, the dog is dull, heavy, and listless, and has no desire to leave his bed. The bowels are irregular, being sometimes loose and at others constipated, and always offensive. The mouth is furred and clammy, and the breath is foul-smelling. Jaundice frequently arises in the course of distemper fever, and not unfrequently marks a fatal complication.

This is too serious an ailment to be dealt with by the amateur, and should receive prompt attention from a qualified veterinary surgeon. Pending his arrival a small dose of sulphate of magnesia may be given, and the dog placed in a warm, dry apartment, where he should be restricted to a liquid diet of milk or beef-tea.

Mange.—Mange is a parasitic disease, and highly contagious. Like other parasitic affections, it finds its readiest victims among dogs which are in bad condition. It is important, therefore, that attention should be given to the maintenance of a high standard of health, by insisting on cleanliness, exercise, and attention to diet.

The first noticeable symptom of mange is a violent and almost incessant scratching. Examination of the skin at this time reveals a number of small, red, angry-looking spots or minute pustules, which sooner or later are broken into sores by repeated scratching. In this way the body becomes

covered with a dark scabby eruption, the hair falls off, the skin emits an offensive odour, and the animal wastes, as a result of the state of unrest in which he is kept, and the constitutional disturbance arising out of it.

As mange, whether follicular or otherwise, is always difficult to eradicate, it is most desirable that the services of a veterinary surgeon be promptly obtained. Moreover, the measures necessary to prevent its spread need such care and experience as is seldom possessed by the amateur. In the absence of professional help the body must be thoroughly washed—using plenty of soap—and after being well dried, a dressing consisting of sulphur, train-oil, and oil of tar should be applied over the entire surface of the skin. This is to be washed off after the lapse of three days, and reapplied if the irritation continues. The floors and fittings of the kennel should be washed with boiling water, and then dressed with a strong solution of chloride of zinc or caustic soda.

Piles.—Piles are small, highly-vascular excrescences, formed by a gradually-increasing distention of the veins within and about the anus or posterior outlet of the bowel. They are mostly seen in old, overfed dogs, who have but little exercise, and occupy heated apartments. They are usually preceded by a period of constipation of the bowels, and in some cases may follow upon chronic diarrhœa.

The disease first attracts attention by blood-stained stools, straining, and more or less fulness around the anal opening. Irritation of the part is evinced by the animal drawing the quarters on the ground, as a result of which small sores appear, and may give rise to ulceration or abscess.

Treatment should be directed to maintain a steady and regular action of the bowels. For this purpose the diet should be spare, and comprise a good proportion of boiled vegetables—carrots, cabbage, or parsnips for preference. Sugar and sweets of all kinds must be prohibited. Brown bread, oatmeal, or ship-biscuits soaked in water, with the addition of a little gravy or soup, should form the staple food. A dose of castor-oil or compound rhubarb pill occasionally will prove beneficial, and daily exercise is indispensable.

Rabies.—Canine madness is a specific contagious disease communicable from dogs to man and to other animals. Its mode of spread is by inoculation. In the act of biting, the contagion contained in the saliva enters the wound and becomes disseminated over the system, ultimately to settle down in and exercise its disturbing action on the brain and spinal cord.

The disease assumes two forms—*dumb* rabies and *furious* rabies. The period of incubation is very variable. It may not be more than two or three weeks, or it may extend over several months, and, in exceptional cases, over a year.

The duration of the disease extends over three to five days, and invariably proves fatal.

The initial symptoms are recognized in some alteration in the temperament, disposition, or manner of the affected dog. He becomes at first

unsociable, listless, with a disposition to hide away in some remote corner. After a short period of dulness and unrest, the dog is noticed to "look strange" about the eyes, *i.e.* they present a glassy, staring appearance, and are directed restlessly towards every moving object. The lower lids have a tendency to droop, and expose the red and congested lining membrane. This gives the face a peculiar haggard look. Every now and then the attention of the dog is fixed upon some imaginary object, at which he rushes and snaps. At this time he is surly, vicious, and destructive, and if at liberty, will wander away and bite anything he may encounter, especially dogs. If on the chain, he attacks his kennel and gnaws it in pieces, or eats his bedding. If in the house, he may tear up the door-mat, the carpet, and in some instances a dog has been known to gnaw off his tail, and tear the skin and flesh of his legs. The mad dog has no desire for food, but will eat almost any kind of rubbish, hence the stomach is almost invariably found to contain some form of foreign matter, such as stick, straw, shavings, stones, &c. As the disease advances he emits a shrill, plaintive howl, which later becomes hoarse and croaking.

If the disease assumes the form of "dumb madness", the lower jaw drops and saliva drivels from the open mouth. With the progress of the disease, the hind quarters become paralysed, and after a succession of fits, more or less severe, the disease ends in delirium and death.

Dogs suspected of madness should, if possible, be placed in confinement on a chain; failing this, they should be shot. When any person or animal has been bitten, it is most desirable to adopt the former course until the case has developed decided symptoms of the disease. Many dogs are killed as mad, after biting some person or other dog, which are not the subjects of rabies at all, but are passing through the maniacal stage of an epileptic fit. A day or two on the chain in such cases would settle the question, and do away with that worry and anxiety of the person bitten, which invariably continues for months when the dog is destroyed and the matter is left in doubt.

Rheumatism.—This is a constitutional disease, usually affecting the limbs and loins. In the dog it mostly assumes a chronic character. Old animals, and especially sporting dogs, exposed to wet and cold, are particularly liable to it.

When the limbs are the seat of attack, the dog is indisposed to move. If induced to do so, he walks with a stiff or halting gait. The part affected is hot and painful to the touch, and may be more or less swollen. In lumbar rheumatism the animal's back is arched, the belly tucked up, and the body carried stiffly. If the loins are pressed, or an attempt be made to lift him up, he shrieks with pain. The pain and lameness vary considerably from day to day, being at one time slight and at another severe; or they may altogether disappear and reappear at varying intervals in the same or in another part of the body.

Rheumatism is hereditary, the exciting causes being exposure to wet and cold after being heated and fatigued, and living in damp kennels. In

house pets it is often provoked by exposure to cold and wet after occupying the hearth of a heated room, and excessive indulgence in sugar, sweet biscuits, and flesh food.

The treatment of rheumatism should be commenced by the administration of a dose of castor-oil or sulphate of magnesia, to be followed by small repeated doses of iodide of potassium or salicylate of soda. The food should consist chiefly of brown bread and well-boiled milk, with vegetables and a little soup or gravy. The affected part may be briskly rubbed with soap liniment once or twice a day, and the patient should be kept warm and free from draught.

Worms.—Tape-worms and ascarides are the most common parasites infesting the alimentary canal of the dog. Both enter the body by means of food and water contaminated with the eggs or embryos. When present, small white segments of the former, or the latter entire, are found now and again in the excrement. Dogs, when largely infested, fall away in flesh, the coat looks harsh and unthrifty, the belly becomes abnormally large, and the appetite is voracious. Occasional vomiting is sometimes excited, and in puppies epileptic fits are common as a result of the irritation they provoke in the stomach and bowels.

Various agents are employed in the expulsion of worms, of which arecanut, santonine, koussou, and kamala are the most efficient. Whichever is used, the dog should undergo a fast of twelve hours, and receive an aperient two hours after the vermifuge.

THE DOG IN TRAINING.

The training of dogs should begin as early as possible; even at the age of a few months much may be done.

One of the first things is to teach a dog to follow well, and to respond to both call and whistle. This at first requires patience and perseverance, and above all, kindness. If he once understands what he is to do, he will soon do it. Guarding house and property can easily be taught by placing some article by his side and telling him to watch. Of course at first he will move away from the object and follow, but he must be led back to the post and forbidden to stir, which he will soon understand. His master should go away out of sight for a short time, and if on his return the dog is at his post, he should be set free, the article taken up, and a reward given. This should be repeated as often as practicable, when it will soon be found that the lesson is learnt, and, when learnt, never forgotten.

Retrieving can be taught in the same way; the great point being to give easy tasks at first, and gradually to make them more difficult. The reward should always be given until the dog thoroughly understands. He should not be wearied by too long a lesson. The task should rather be made a pleasure.

Nearly every dog will take to the water if encouraged; he should never

be thrown in, as is often done by ignorant persons. The idea in teaching should be to retrieve not merely small articles, but also heavier bodies, so that, if occasion requires, life may be saved. Much may be done by the presence of a good water-dog, for animals are apt imitators, and will readily follow one of their own species into the water. Use small pieces of biscuit, and throw them at first into shallow water, so that they may be reached by wading; by degrees throw them to greater distances, and when these are retrieved show appreciation by reward and caress.

To teach a dog to dive, or to carry a rope, patience and perseverance will be necessary. Let the object be white in colour and heavy enough to sink. For first experiments still clear water must be chosen, and the depth may increase by degrees. The species best adapted for this work are retrievers, St. Bernards, and Newfoundlands. In order to teach the rescue of drowning persons, make of material that will float a figure resembling a human being. Take this figure out in a boat and cast it overboard, allowing the dog to see it from the shore or river bank. If he has been taught water-retrieving properly he will soon understand what is expected of him, and readily do it—almost of his own accord. On no account make the lesson long. After the animal has left the water let him have a good run, so that he may keep up the circulation and free himself from moisture. Before returning to the kennel he must be rubbed dry, for he should not remain wet. His ears should be examined, and dried if necessary. Dogs should never enter the water immediately after a heavy meal, nor at all if the weather is cold.

The best species for tricks are poodles, collies, pomeranians, terriers, and spaniels, in the order given. Larger breeds can often be taught, but the best tricksters are invariably the smaller species.

CONCLUSION.

The dog tax is 7s. 6d. per annum for all dogs over six months old, and is payable on January 1. The only dogs exempt are those kept solely for tending sheep or cattle, and dogs kept for leading blind persons.

The chief dog clubs are the Kennel Club, 7 Grafton Street, Bond Street, London, W.; the Ladies' Kennel Association, Belfast Chambers, Regent Street; and the Toy Dog Society (secretary, E. T. Cox), 65 and 66 Chancery Lane, E.C.

Publications: *Modern Dogs*, by Rawdon Lee (Horace Cox); Vero Shaw's *Book of the Dog* (Upcott Gill); *Dogs and Doggy People*, by C. H. Lane (Hutchinson); *The Kennel Gazette*, 6d. monthly.

THE CAT.

Cats are generally divided roughly into two sections, the long-haired and the short-haired. The long-haired include Persians and Angoras, but the latter have been practically merged with the Persians, and no attempt is made to separate them. The Short-hairs include the British, the common cat of this country, the Manx, the Siamese, the Abyssinian, and any other variety. Many people consider the Russian to be a separate breed, but for exhibition purposes it is classed merely as a "blue short-hair".

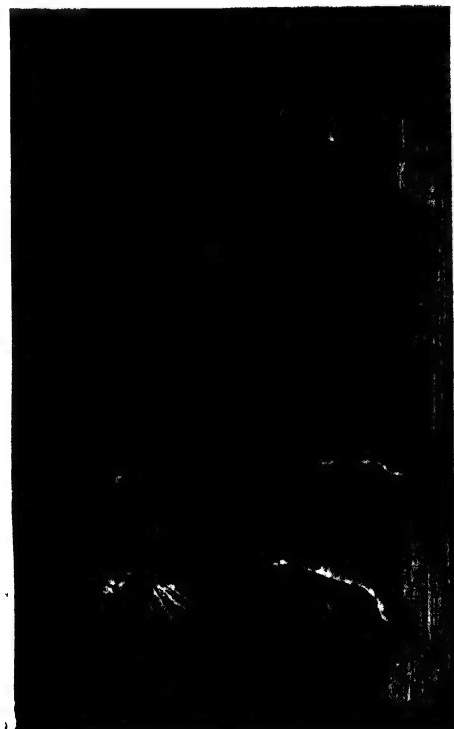
These two chief divisions may be sub-divided into self colours, tabbies, and any other colour. The self colours include blues, blacks, and whites; the tabbies include silver, brown, red, orange, and blue tabby; and the other varieties are smoke, chinchilla, tortoise-shell, tortoise-shell and white, and creams. Black-and-white cats have lately been encouraged, but neither they nor other parti-colours are popular.

In general points, in fact in everything except coat, the British cat and the long-hair are similar. A broad head, short nose, small ears, short thick legs, and cobby body are desired. In the long-hair the tail should be short, but in the short-hair this is not essential or even desirable. In colour, also, with a few exceptions, the two breeds are similar. The exceptions are as follows:—In short-hairs there are no chinchillas, and there are very few smokes, and what there are show markings; there are very few creams, and there are considerable differences between the long-haired orange and the short-haired red. To proceed to details: **blacks** must be densely black, with deep-orange eyes; **whites** must have brilliant blue eyes; **blues** must be pure, unmarked, and unshaded blue with deep-orange eyes.

Brown tabbies must have a ground colour of warm red brown, with clearly defined bands of densest black; eyes green or orange. **Silver tabbies** must be similarly marked on a pure silver ground, and must be free from any brown tinge; eyes green or hazel. **Oranges**, which are usually long-hairs, must be a clear, brilliant orange with hazel eyes, and may be marked or unmarked according to taste, but they should be one or the other, and are generally a mixture of both.

Short-hair oranges are at a discount, and a much darker deeper shade is desired; moreover, tabby markings of darkest chestnut red or a lighter red ground are essential; eyes hazel. The blue tabby is merely a marked blue, and is not popular. **Smokes** should be white at the roots of the hair and shade and black at the tips, giving the impression of an almost black cat with a pale ruff. Markings on the face are objectionable; eyes amber.

The **chinchilla** is a practically white cat which has each hair tipped with silver. A dark mark down the back or markings on the face and legs are undesirable, but most chinchillas have them more or less. Any tinge of brown is fatal. Eyes emerald green. The **tortoise-shell** is a mixture of black, red, and yellow, and the colour should be laid on in small distinct



WAB SALAMU, 1965 HAHUUR



patches; eyes hazel. The **Manx** cat should be absolutely tailless; his face may be rather longer than that of the British cat, from which also his coat differs slightly. He should have a short, strong back, and long hind-legs, with very muscular thighs. In colouring he is similar to the British cat.

The **Siamese** is, as a rule, more slenderly built than the British cat, his head is smaller, and he shows great quality. He should be of a clear, pale, biscuit colour, with a deep chocolate mask, tail, and legs. The markings should be sharply defined. As the cat ages, the body colour darkens, but this should be merely a general darkening, and should not give a patchy effect. The tail may be either straight or kinked. The eyes should be brilliant blue.

The **Abyssinian** is exactly the colour of a wild rabbit and should be ticked all over. It should have no bars on the legs and no dark mark down the spine.

The coat of the long-haired cat should be long, thick, and of a fine quality. He should have a heavy frill and chest coat and a thick brush. The coat of the British cat should be short, thick, hard, and glossy. The **Manx** cat's coat is rather more open and "stary"—rather like a moulting British cat.

The coat of the Siamese is of a finer, softer texture, but should be extremely short and glossy.

Treatment.—Plenty of fresh air and a natural diet of meat, raw for preference, is the secret of having happy healthy cats. The popular notion that milk is a suitable diet for cats is practically exploded. A cat which has absolute freedom can digest a variety of food, but it should always be allowed a large proportion of meat; while cats which are kept in confinement should have an entirely meat diet. Cats should not be kept in heated houses; in fact, any artificial heat, except that which comes from an open fireplace, is bad for them.

Cattery cats should always be provided with plenty of coarse dog grass to nibble at, and during the moulting season they must be combed and brushed daily or they will probably swallow sufficient hair, when licking themselves, to cause stoppage and death.

Cats can stand any amount of cold, and some of them are even imperious to damp and draughts if they have plenty of fresh air and are meat-fed, but it is advisable to see that their sleeping-houses are well built and dry, and that they have warm comfortable beds, frequently renewed, of hay or straw. Full-grown cats may be fed once or twice daily, and kittens three or four times.

A few of the most common ailments to which the cat is liable are here dealt with.

Distemper.—This is a highly infectious disease, and may attack cats of any age and breed. If it once gains an entrance to a cattery it is a serious matter, the mortality from this disease being sometimes as high as 80 per cent.

The early symptoms are lassitude and dullness, disinclination for food,

high temperature, and sickness; the later signs are catarrh of the head, resulting in the typical sneezing and discharge of purulent mucus from the nose and eyes, great prostration, and often diarrhoea of an obstinate nature. The disease generally runs its course in about three weeks, and death may occur from weakness or other complications, such as pneumonia or inflammation of the bowels. There are two forms of distemper, the virulent and the mild. The disease is often contracted at shows and other public places.

Treatment.—Sustain with nourishing foods—beef-tea, raw or boiled fish, bovril, brandy and milk, &c. Steam the cat's head three times a day with a sponge and hot water, and add a few drops of oil of eucalyptus. Careful nursing is all-essential, and tonic medicines, such as quinine, iron, cod-liver oil, &c., are beneficial.

Any complications which may arise should be attended to at once.

Influenza is very similar to distemper, but is not so virulent. The treatment is on the same principles. Frequently it requires the skilled veterinarian to differentiate between the two diseases. It has been suggested that influenza can be communicated from cat to man, and *vice versa*, but so far investigations do not support this theory.

It has, however, been experimentally demonstrated that distemper in the dog and the cat is analogous, and can be communicated from the one to the other.

Eczema.—This is a constitutional disease, and often occurs as a result of too much stimulating food and want of exercise.

Symptoms are: Irritation of skin in parts of the body and consequent scratching; small pimples appear, which run together and form areas about the size of a shilling; liquid oozes from these, and the hair drops off, exposing the raw, irritated, and inflamed surface.

Treatment.—Clip the hair from the surrounding part, apply soothing ointment, feed on milk diet, and give preparations of arsenic and iron, and laxatives.

This disease tends to recur, and is often of an obstinate or incurable nature, especially in old cats. It is not infectious.

Catarrh, or cold, is of frequent occurrence. The cat is fond of heat, and will lie for hours in front of the fire. Open windows and draughts are the most common causes of catarrh.

Symptoms.—Sneezing and discharge from eyes and nose, commonly accompanied by sore throat and difficulty in swallowing.

Treatment.—Keep in the house in some place in which the temperature is uniform, steam the head if the discharge is profuse, if the throat is affected apply stimulating liniments and wrap it in flannel or lint. Colds, if neglected, may result in pneumonia, pleurisy, tuberculosis, &c., as in the human subject.

Tuberculosis or Consumption is more common than is popularly supposed. Persian cats appear more susceptible than other varieties.

Symptoms depend on whether the lungs or the bowels are the seat of

the disease. If the lungs are affected, the presence and nature of the disease are generally shown by catarrh, sneezing, and discharge from nose and eyes, difficulty in breathing, fever, progressive emaciation, and death from weakness; if in the bowels, obstinate diarrhoea and wasting.

Consumption may be communicated from the human subject to the cat and dog, or *vice versa*, and this fact is important when we recollect how fond children are of caressing cats.

Treatment.—Little can be done, and it is often very difficult to distinguish between simple catarrh or cold and tuberculosis in the early stages of the disease.

Numerous other diseases attack the cat, such as inflammation of the bowels, lungs, or other organs, and skin affections, such as mange and ringworm. Worms in the stomach or bowels are of frequent occurrence.

Cats often meet with accidents resulting in fractured limbs, and it is interesting to know that if attended to immediately (provided the bone is not severely shattered) and the leg set in plaster of Paris, the results are highly satisfactory as a rule; lameness gradually passes off, and the animal regains the perfect use of the limb.

CAGE BIRDS.

No pets are more general in the homes of the people of the British Isles than cage birds. One of our greatest statesmen said that the presence of a canary in the window of a house was evidence of refinement of character and kindness of heart in the occupants. True though this be, it is astonishing how few out of the many thousands of people who keep cage birds as pets know how to treat them properly, and every year thousands of charming little songsters come to an untimely end, owing to the ignorance and mistaken kindness of their owners. Strange though it may seem, many sacrifice their pets because they do not in the first place consider what kind of bird is best suited to their environment. It is quite evident, for instance, that large birds like Magpies, Jays, Blackbirds, Thrushes, and Starlings will not thrive in places where there is only sufficient accommodation for such birds as Canaries, Goldfinches, or Linnets. The question is often asked, What is a cage bird? It seems simple enough, and yet many people make pets of birds which are altogether unsuited for confinement.

CANARIES.

A number of clubs are devoted to the interests of the canary: the Birkenhead Canary Fanciers' Association, 23 Lilly Street, Rockferry; Border Counties' Norwich and Cinnamon, 10 Lothian Street, Hawick; Border Fancy, Green Terrace, Hawick; British Roller, 3 Scylla Road,

Peckham Rye; Cinnamon, Holmes Street, Derby; City and Suburban and Scotch Fancy, 6 Old Burlington Street, London; Crested, 169 Sloane Street, S.W.; Edinburgh Norwich Canary and Mule, 3 Wardlaw Terrace, Edinburgh; Green Canary, 28 Pembroke Place, Liverpool; Irish Yorkshire, 18 North Earl Street, Dublin; Lancashire and Lizard, 52 Queen Street, Shaw, Oldham; Nelson and District, 127 Leeds Road, Nelson; Northern Crest, 41 Shield Street, Newcastle-on-Tyne; Norwich Plain Head, 9 Richmond Road, Chorlton-cum-Hardy, Manchester; Scotch Fancy, National Derby, 446 Victoria Road, Crosshill, Glasgow; Scotch Norwich Plainhead; Southern Yorkshire, 140 King's Road, Kingston-on-Thames; Yorkshire, 6 Carlisle Place, Manningham, Bradford.

The Yorkshire.—This bird is by far the most distinguished-looking member of the canary family. He is tall of stature, very slim in structure, and immaculately clothed in a coat of the tightest and finest quality. It is said that the Yorkshire should be slim enough to go through a lady's wedding-ring. This variety is most extensively bred in the county from which it takes its name. Bradford is the great centre, and in the city and its suburbs are to be found thousands of breeders of these charming birds. These men are for the most part engaged in the great woollen industry of the district during the day, and spend their evenings amongst their pets, which are a source of income.

The Lancashire.—This is the giant of the canary tribe, first-class specimens often measuring as much as seven and a half or eight inches in length. It is a fine bold, upstanding bird, broad in the head and firm in the shoulders, its whole appearance being that of strength and massiveness.

There are plain-headed Lancashires, and those with coppies or turn-crowns, the copy being a kind of crest. In breeding, the birds are paired, not plainhead to plainhead and copy to copy, but plainhead to copy and copy to plainhead. By this means the symmetry of the copy is maintained; whereas if opposite lines were followed the birds' heads would become disfigured by ugly malformed coppies, and also by sore ulcerated patches. It is a curious fact that the continued pairing of coppies to each other produces running sores on the skull, and utterly destroys the arrangement of the crest or copy feathers, which should fall away from the centre of the skull in the form of a daisy.

The Scotch Fancy.—Many are the changes which have been wrought in this variety by the enterprise of breeders. Some twelve or fifteen years ago the Scotch Fancy was a small slim bird, curved like a half-moon. To-day he is a big, fine, bold fellow, who stands well up on his perch, which he grasps firmly, draws up his high broad shoulders, throws out his head snake-like on a long fine neck, and brings his tail down under his perch as though it were a bit of whalebone. To the non-fancier the bird which emanates from the land of Burns is far from beautiful, and the taste for Scotch Fancies, like that for tobacco, has to be acquired.

The Belgian.—So named from the little state on the other side of the English Channel, from which it first emanated, and where it is to-day bred in large numbers, especially in Antwerp and Ghent. It is something like the Scotch Fancy in contour, in fact there is little difference between the two to-day, except that the Scot brings his tail, or should do so, under the perch, whilst the Belgian should hang his in a perpendicular line with his shoulder and body. The Scotch Fancy of to-day is practically composed of seventy-five per cent Belgian and twenty-five per cent of the old Glasgow Don blood. The Belgian is a very intelligent bird, and its breeding in the British Isles is in the hands of a very select coterie. It is not generally accounted a strong bird, and this fact greatly militates against its popularity.

The Norwich, as its name implies, is closely connected with the eastern city whose name it bears. It is said that there are in that city alone 4000 breeders, whilst other great centres in which this bird is bred are Northampton, Coventry, Nottingham, Preston, Plymouth, and Aberdeen.

The Norwich is undoubtedly the most popular breed of canary. It is a robust, hardy variety, neat and smart in appearance, being about six inches long, resembling the robin in shape, and carrying more colour than any other breed. Its great features are its chubby appearance, its rich orange-like colour, and tight silky coat.

The Lizard.—This is one of the oldest varieties known, but, for one reason, it is not very popular, although it is still one of the most beautiful. It is rather smaller than the Norwich; its ground colour is of a dark hue, its beak, legs, and claws are black; it has a clear yellow cap, and its back is spotted or spangled, like the reptile from which it takes its name.

The chief reason why it is not popular is because its beautifully spangled back does not last longer than one season, its glory fading away more and more with each successive moult after the first.

The Border.—This is the smallest member of the canary family, and in appearance is something between a diminutive Yorkshire and a Norwich. It is a smart, perky little bird, and is extensively bred in Cumberland, Westmorland, Berwickshire, Selkirkshire, and Dumfriesshire. Carriage of body and beautiful silky feathers are leading characteristics of the breed, and anyone wishing a bright, vivacious little pet should secure a canary of this kind.

The Crest.—This is quite the aristocrat of canarydom, and most fabulous prices are paid year by year for good specimens. Some time ago the great Norwich breeders, Messrs. Mackley, sold a bird known as the King of Champions for £70, whilst such figures as £25 and £30 are common every year. In body the Crest is rather larger than the Norwich, but, as its name indicates, its one great feature is its crest or turncrown. The headgear of the Crest differs from that of the Lancashire Copsy, inasmuch as the former must fall away from the centre and droop well all round the head, but the latter must finish just behind the eye, and the back of the skull must be plain. In this variety, as in

the Lancashire, there are the crested and crested-bred birds, and they are paired in the manner described in the notes on the Lancashire.

The Cinnamon.—So named because of its likeness in colour to the ordinary cinnamon spice. In shape the Cinnamon is like the Norwich, in fact it may for all practical purposes be said to be a Norwich, but of a dun or chocolate colour. It is a widely-cultivated variety, and one which appeals strongly to the breeder of cultivated taste.

The German.—This is the great songster of the world. For years canary breeders in Germany have been breeding canaries for song, and beautifully mellow voices the little birds have. The finest vocalists come from the Harz Mountain district, where something like 50,000 of these birds are reared, trained, and exported every season. The one great drawback to the German canary is that it is not robust, and quite ninety per cent of those imported die before they have been in Britain eighteen months.

GENERAL MANAGEMENT OF CANARIES.

Food and Water.—The food for an ordinary pet canary is canary-seed and summer-rape, that is, the small red rape, with occasionally a pinch of maw, inga, or hemp seed. Green food such as water-cress, groundsel, and chickweed should be given three or four times a week, but care must be exercised to see that it is not frosty, or diarrhoea will result.

Fresh water must be given every morning, and in warm weather should be renewed in the afternoon. A bath should be given about twice a week. During the moult a rusty nail should be placed in the drinking water, and a little sulphate of iron, about the size of a pea, every other day.

The Cage.—The cage for a song-bird ought never to be less than fifteen inches long and nine or ten inches wide, height in proportion. Thousands of birds die every year through being confined in small cages. A bird must have room in which to exercise his wings, or he will soon die of consumption or asthma.

Diseases.—It is of little use for the ordinary individual to attempt to doctor canaries; their lives hang on too fine a balance, so fine that even the expert has to be exceedingly careful in his treatment. Still, there are one or two minor complaints which it is possible for a mere novice or amateur to cure. The huskiness which often affects canaries, especially during the moult, can be cured by mixing ten drops each of glycerine and whisky to a wine-glassful of water every morning, and giving it in place of the ordinary drinking water. Diarrhoea in its early stages can be cured by giving the bird weak brandy and water to drink, or a little powdered chalk mixed with some hard-boiled yolk of egg to eat.

W. T. Greene (L. Upcott Gill); *Foreign Finches* (Butler); *Foreign Cage Birds* (Butler). There are many cage-bird clubs. A list of the principal ones will be found in the *Englishwoman's Year Book* (A. & C. Black).

MONKEYS AND MARMOSETS.

The best varieties of monkeys to keep as pets in Britain are Capuchins, Mangabeys, Bonnet Macaques, Spider monkeys, Jew monkeys, and Diana monkeys, all of which have been kept and have done well in this country. Of these probably the Capuchins are the hardiest; and the Spider and Diana monkeys require most care, and are most difficult to keep in health. There is one point against the Bonnet monkey as a pet, its strong mousy smell; but this variety is most amusing, with funny little habits and very human ways. Spider monkeys are rare, and few are brought to Britain; they are very affectionate, engaging little animals. The feeding of monkeys is most important. Boiled potatoes and boiled rice should be their staple food, varied by bread-and-milk. Slices of apple, banana, or any fruit may be given in small quantities. They are very fond of dry wheat and oats occasionally. They should be fed twice a day, and water given two or three times a day, but it is best not to leave water in the cage, as it is generally spilled. Their cages should be large, square, and of galvanized wire, similar to, but stronger than, a parrot's cage. The fastening must be secure, and of a kind not to be opened by the monkeys, who soon learn to open any handle or bolt; a padlock, locked, is the only safe fastening. A satisfactory monkey cage can be obtained at the Army and Navy Stores; price, for largest and strongest, 32s. 6d. Great cleanliness is necessary to keep the cage in desirable condition. It must be cleaned out every day, and the bottom thickly covered with Jeyes' or Sanitas sawdust, and the perches and swings scrubbed with coal-tar soap and Condy's Fluid. It is absolutely necessary that the cage be placed out of draughts, to which monkeys are very susceptible. For convenience in handling and taming them it is best to put on them a belt, and light chain or leather dog lead; the belt should consist of a piece of soft leather, sewn firmly together, as a buckle is apt to wear the hair off; but a very soft little dog collar will sometimes do as well, and is easier to put on.

Chest diseases, coughs and colds, should be treated exactly as in the human patient: keep warm, and at once give cough medicine, and the ordinary remedies for cold. For constipation, give a little magnesia in milk; for diarrhoea, dry rice and rice water. When they are a little ailing, a raw onion often works wonders in the way of a cure; and they may be seen to rub it on their bodies to benefit by the external application also.

Marmosets need great care and great warmth. They have bred in Britain, when kept in a warm greenhouse, with a hot-water bottle under the nesting box, and the tiny babies at three months of age are

quite human and recognize their friends. Apart from temperature, the chief danger in breeding is from the mother, for she often kills one or more of the young ones before they are rescued. The infants have to be fed with milk administered by a medicine-dropper or pen-filler. The diet of grown marmosets needs care and thought, as they are capricious in appetite. A teaspoonful of milk, in which are three drops of nuxvomica, may be given as breakfast, to ward off the paralysis which always threatens these tiny animals in Britain. They are insectivorous, and should have mealworms every day, occasionally spiders, large moths, and other insects. Their chief food is rice pudding, rather sweet, or rice boiled with sultanas; a piece about the size of a walnut is a meal for a full-grown marmoset. They will eat sponge cake, biscuit, and bread-and-milk, and should have fruit, banana, apple, grapes, &c. A little round straw bird's nest is a good sleeping place for them; and their cage, which should be wired only in front, to keep off draughts, should be in a very warm place, in which there is no danger of a sudden fall of temperature; a cupboard over a hot-water tank has done well.

RABBITS.

These are amusing pets, especially when young, but apt to become uninteresting when no longer so. There are various kinds, including the common, the Lop-eared, said to be of Chinese origin, and gray or fawn; the Flanders Giant, long and supple in body, ash-gray or slightly fawn in colour: when well fed this rabbit attains an enormous weight and size, but it needs care and great variety of food. The Silver has slate-blue hair mixed with silvery ones, is not very large, but well-made, with straight ears. The little ones are born quite black, turning gray and silver at the age of two or three months. The Angora, of Turkish extraction, has a beautiful fur, long and silky. It is cultivated largely in parts of France for this fur, which is woven into woollen materials. They are white, gray, or black. The Russian variety is the smallest and prettiest. The colour is white, with black nose, paws, tail, and ears, and pink eyes. The little ones are born white, and in about six weeks develop black points. The Japanese has a curious yellow, black, and orange coat. The Dutch is black with white shoulders, paws, neck, chest, and forehead. The Butterfly is white with black nose and circles round the eyes, a black line down the back, and spotted black on the flanks. It is called "butterfly" from the appearance of the ears.

TREATMENT.

Cleanliness is the first essential, after abundant and varied food. The cages should not be less than a yard wide, and seventeen yards deep. Each should have its drainage formed by a zinc channel sunk below the level of

the cage, and slightly tilted. The rack should be just high enough for the rabbits to reach the food when standing on their hind-legs. As far as possible from it, and in a firmly fixed wire receptacle, the white-enamel drinking cup should be fixed, high enough to be out of risk of contamination from the rabbits themselves. A good supply of fresh drinking water is necessary.

FOOD

In summer the hedgerows are full of many plants that are eagerly eaten by rabbits, such as hedge-parsley, sow-thistle, dandelion, clover, sorrel, wild vetch. Dandelion has a medicinal effect upon the kidneys, and should not be too freely given. Rabbits like short fine grass. Lettuce is a favourite food, but, as it contains much water, should not be given in great quantities in wet weather. Cabbage, endive, and chicory are all good. In winter they like raw carrots, beetroot, hay, turnips, and cooked potatoes. The peel is bad for them, whether cooked or raw.

Meals should be given twice a day at a fixed hour. All forage should be put in the rack; otherwise it gets trampled and dirty. Roots should be washed before being given to rabbits.

HYGIENE.

Rabbits need plenty of air and light. Their cages must be kept scrupulously clean, and free from damp. They like quiet and are very timid. They should have a good bed of broken straw, hay, or heather, often changed, except when there is a litter of young ones. They must not be disturbed till their eyes are open.

MALADIES AND REMEDIES.

Indigestion—Bad Appetite.—Keep the invalid on a restricted diet, a few stalks of mint, marjoram, fennel, chervil, parsley; but neither fennel nor parsley must be given to nursing mothers.

Sore Ears.—Caused chiefly by the deplorable habit of lifting rabbits by their ears. It is a contagious form of inflammation. The best remedy is to pour into the ear a few drops of warm water in which a small quantity of sulphate of potassium has been dissolved.

Cold.—The invalid coughs, and has his fur rough and his ears lying on his back. He must be kept warm, out of draughts, and away from damp. The nostrils should be powdered with flowers of sulphur.

HOME OCCUPATIONS FOR PROFIT.

BEE-KEEPING.

Few employments lend themselves more readily to home management than bee-keeping. The care of an apiary is well within the scope of a woman's work, the labour being light; but careful attention to detail and constant supervision are essential to success.

At the same time, to pretend that large and certain incomes can be made by bee-culture would be absurd; the variable climate of the British Isles has to be reckoned with, and a cold late spring or wet summer causes a sad deficit in the honey yield. Still, taking one year with another, and considering that the initial outlay is but small, and that the stock increases rapidly, bee-farming may be recommended as a means of adding to small incomes.

Honey, too, is in universal demand as a food, and a local market is rarely lacking for first-class honey, carefully put up in attractive sections, or run into clear glass bottles. In large towns tradespeople readily purchase it, if they are satisfied that the quality is good and the price reasonable. Beeswax, again, is easily sold, and many chemists will deal in honey, if the latter is of fine quality and thoroughly ripe before extraction.

It is also an accepted fact, that for the orchard, bees are valuable fertilizing agents, and the difference in the fruit harvest is very perceptible where the blossoms lack the visits of these tiny, fairy brownies.

The Profits of Bee-keeping.—In favourable seasons a strong hive should bring in from £1, 10s. to £2 profit at least, and if the bees are fed with syrup in the early spring the cost is well repaid by the increased honey harvest. The stronger the colony the greater their activity, and the more honey they gather. Fifty pounds per hive may be taken as a fair average weight, though it is frequently exceeded in good seasons.

How to Start Bee-keeping.—To commence bee-keeping under the best conditions, swarms should be ordered early in the year. Two, or at most three, hives are enough for a beginner to start with, and either pure Italian or Carniolan bees are most suitable, being quieter to handle and less disposed to sting than the ordinary brown bees of this country. A good swarm of Italians or Carniolans should weigh from 4 to 5 lbs., and would cost 15s. to 20s. each, while swarms of the "ordinary" kind may be had for 10s. to 12s. Healthy swarms, headed by young prolific queens, located in

new hives of modern type, are far preferable to old stocks, as the latter may contain black, misshapen combs difficult to manipulate, besides being at times weak in bees, or perhaps diseased, in which case they would be dear as a gift.

(2) floor-board, (3) body-box or brood-chamber within; (4) surplus-chamber, with frames for extracting; (5) "lift" for raising roof when sections of honey are being filled; (6) roof. A hive of this kind costs about 20s. unpainted.

Should a honey-crop be desired the first year, a stock of bees should be purchased from a reliable dealer, on frames of comb containing brood and food, for about 25s. to 30s. A stock so purchased in April may be readily transferred to the hive (fig. 532) if on frames of "standard" size, and if stimulated by judicious feeding a good start may be made with the expectation of getting surplus honey or, if preferred, a couple of swarms before July. Care, however, must be taken to purchase only from a trustworthy man, as the dread bee-disease known as foul brood is most infectious.

The right aspect for bees is a question often disputed, but S.E. is favoured by most. A quiet, sheltered spot is most suitable, with a free flight for the bees in front, and room in rear of the hives for all bee-work to be done, because the bees resent anyone standing in their direct line of flight. On no account should hives be moved—even a few yards—to new stands in the same garden, or the bees will fly back to the old location and be lost. They should therefore remain in one spot throughout the whole season.

Water is a necessity, and should there be no running stream near the apiary, a constant pure supply must be kept in shallow pans, with crossed straws or pebbles to prevent drowning. Though there are many drinking fountains and other appliances which can be purchased, the bee-keeper,

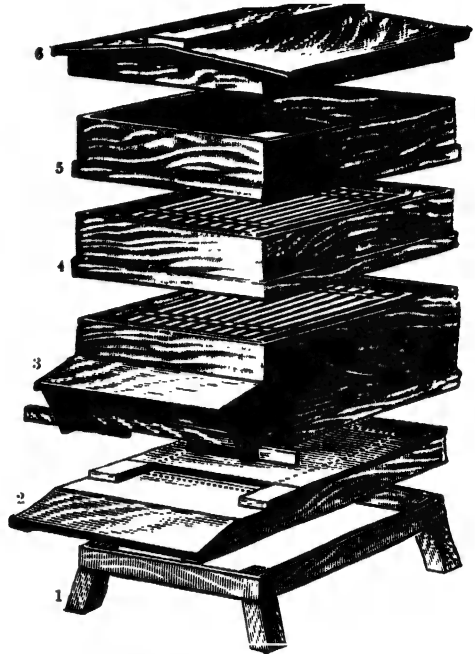


Fig. 532.—A Modern Hive.

when commencing, will do well to expend more money in good hives and healthy stocks than in a multitude of appurtenances. When the site for the apiary is being finally decided upon, bear in mind that proximity to fruit orchards or heath-clad moorlands is of great advantage, the former yielding early, and the latter late, crops of honey. But the main sources of supply come from such field-crops as white clover, sainfoin, mustard, and rape, and also from lime-trees. For spring, a few early garden-flowers may be grown near the hives, such as crocus, *Limnanthes Douglasii*, wall-flower, mignonette, borage, &c. These yield pollen in early spring-time, which is such a necessity, as forming the nitrogenous portion of their food, that it must be supplied to the bees artificially in the form of pea flour should crocus, willow, furze, and other early blossoms fail. Sprinkle the flour on chopped straw in damp-proof boxes.

The Management of a Swarm.—Given a dry warm summer, the bees will begin to prepare for swarming from a healthy stock-hive in May, and sometimes hang out in thick clusters for several days before the old queen leads out her train, leaving the young one to reign in her stead. The old-fashioned clapping of tongs and drumming on tin pails when the swarm issues from the hive is now considered wasted energy, and smearing the new hives with sugar, beer, and treacle is also a custom of past days and quite unnecessary labour. When the swarm at length issues, and the bees settle on the branch or bush chosen by their queen, put the new hive (with its frames fitted with comb foundation beforehand) in the position which it is to occupy permanently; then, taking a clean skep in one hand, give the bough a vigorous shake, and the swarm will drop into the receptacle. The skep is then turned over on to a board—or a table-cloth laid on the ground—and propped up on one side. In a short time, if the queen is safe in the hiving-skep, all the flying bees will rejoin her. When they have collected again around the queen, place the skep near the new hive, and towards sunset proceed as follows.

Put in front of the new hive a table or stand of the same height as that on which the hive rests; see that the floor-board is perfectly level or the combs will be built crooked; and rest one edge of it on the alighting board. Prop up the front of the hive an inch or so with pieces of wood, to afford free entrance to the bees. Lift up the swarm gently, and throw the bees out with a jerk, on to the table close to the hive-front; then, with a spoon, guide a few bees to the entrance, and they will all readily run in. The queen usually makes for the lifted hive, and is followed by the rest. She can be easily recognized, as she is not so broad in shape as a drone, but longer than the working bee, while her wings are much shorter than those of either.

When the swarm find the comb foundation, they soon set to work to furnish their new home. Quilts—the inner one of American cloth or calico, and the outer of felt—must be provided to fit over the frames. In very wet chilly weather it is prudent to feed the newly-hived swarm for a few days with a little syrup, or the bees will grow weak.

Harvesting the Honey.—After working for about five or six weeks, stock-hives should be furnished with supers—in fine hot seasons about the end of May—to be in readiness for the honey-flow. This sets in when the white clover is in full bloom. In heather counties the bees are moved up to the moors when the clover harvest is over, but it is not advisable to mix the honey in this way. The honey from garden-flowers and clover is light in colour, while heather honey is usually dark. In June and July, when bees work hardest, three or four supers may be placed on one hive, and either full sheets or narrow strips of comb foundation should be placed in each section. The sections must remain on till full and capped over, then be removed and stored in a warm dry place till needed for market.

Marketing the Honey.—Well-filled sections should weigh about 1 lb. each, and usually fetch from 1s. to 1s. 3d. per lb. retail. Heather honey, though dark in colour, is very delicious, and sometimes sells for as much as 1s. 6d. per lb. If glazed, the sections travel better packed in hay, and are much improved in appearance, a matter of the greatest importance in preparing honey for market. No matter how excellent the quality, uneven sections, or smeared and badly-corked bottles, detract from the value. Honey should not be extracted till the cells are well capped or sealed, for this shows that the honey is thoroughly ripe and not liable to fermentation.

The Use of the Extractor.—Honey for sale should be extracted from surplus-chambers, or supers placed above brood-chambers. By means of the extractor (fig. 533) the honey is emptied from the cells by centrifugal motion. Since the introduction of this machine, extracted honey has grown very much in favour with consumers, as being free from pollen or brood, besides being untouched by the hands in process of removal. When using the extractor one should have ready a pair of good uncapping-knives, well sharpened, a deep jar of hot water, and a large basin of cold water in which to dip the hands as they become sticky. Begin by taking a frame of comb, resting the lowering end of top-bar in a dish, and with the uncapping-knife—just removed from the hot water—shave off one side of capping by an upward movement of the knife. Turn the comb and uncap the other side; then place it in the extractor and rapidly turn the handle, when the honey is thrown into the cylinder by the rotary motion. In order to guard against damage to the cells an even speed should be maintained,

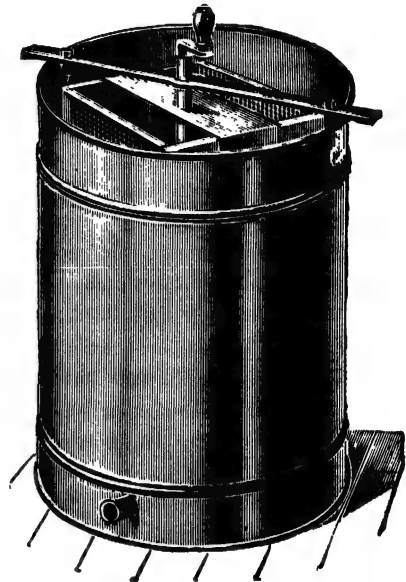


Fig. 533.—Honey Extractor.

and as soon as one side is empty the comb must be reversed. The extractor saves the bees much time and labour, and consequently increases the yield of honey, for when the empty comb is replaced in the hive, the process of refilling commences at once if honey is plentiful.

Wintering the Bees.—When September comes, the wintering of the bees must be attended to, and each hive should contain at least 20 to 30 lbs. of honey to serve as stores. Syrup-food should not be given after this month, soft candy only being suitable for winter feeding. The candy, moulded into cakes weighing about 2 lbs., is placed upon the frames under the quilts, and renewed as required.

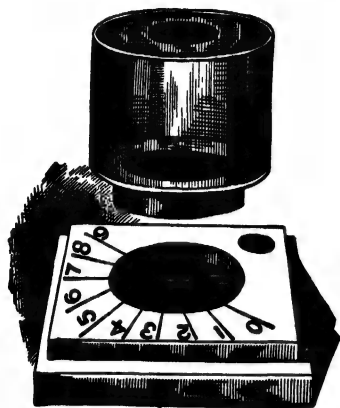


Fig. 534.—Bottle-feeder.

Should the winter prove severe, or spring be late, warm syrup-food should be given in March by means of a bottle-feeder (fig. 534), which is placed above the feed-hole in quilts, or coverings of frames. Warmth is so essential that the frames must be covered with quilts made of woollen stuff, the double walls of the hives being filled in with chaff or cork-dust.

Diseases of Bees.—Bees are subject to dysentery, proceeding from damp hives or carelessly boiled, and therefore fermented, syrup. "Foul brood" is, however, the worst pest, and must be guarded against by careful enquiry when the stocks or swarms are purchased. Second-hand hives should be avoided. Naphthalene in the hives is considered a useful preventive of infection, but it should be frequently renewed.

How to Handle Bees.—When handling bees it is well to wear a veil



Fig. 535.—Protection Veil.

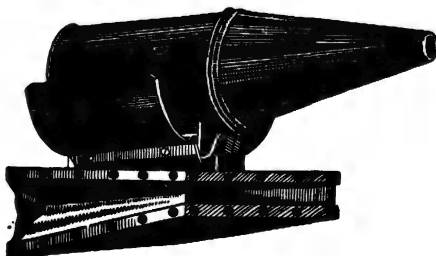


Fig. 536.—Bee-smoker.

(fig. 535), but not gloves, as if the bees have been alarmed by a puff of smoke driven into the hive by means of a bee-smoker (fig. 536), they at once gorge themselves with honey and are not then inclined to sting. Before swarming, they fill their honey-sacs, and are in a fairly amiable mood; but the evening is the best time for hiving swarms.

Queens may remain fertile for four or five years, but to keep the

stock strong and healthy renew the queen every two years. The cages in use make queen introduction quite an easy matter. Should a stock become queenless by accident, the bees show restless agitation and work but little; while if there are no eggs or brood in the hive at the time of her loss to raise as queens, the bees soon dwindle and die.

Gelieu, the ancient writer on bees, sums up in one pithy sentence the chief rules for health in an apiary. "Bees", he says, "should know not real disease . . . with fine food, warmth, and cleanliness they fail not to thrive apace."

Useful books on the subject are: *Pleasurable Bee-Keeping* by C. Nettleship White (Edward Arnold), 2s. 6d., and *The Book of Bee-Keeping*, by W. B. Webster (L. Upcott Gill), 1s.

JOURNALISM AND LITERATURE.

The journalism which can fairly be classed among home occupations is of necessity limited in scope. Yet a considerable proportion of the press-work which naturally falls to the share of women can be done, and is done, with more or less success, by those who have other interests in life to which part of their time must be devoted.

Of course, not every girl who has won a prize in a short-story competition, or a certificate from the essay society belonging to her pet magazine, is capable of becoming even a mediocre journalist, for the knack of stringing words together smoothly is not of itself a sufficient qualification, valuable though it may be. Intelligence, a good memory, powers of quick and accurate observation, business capacity, and that peculiar but indefinable aptitude for the work which is almost more essential to success than downright talent—all these, besides good health and a fine stock of patience and perseverance, are indispensable attributes.

The beginner must at the outset lay aside any idea of publishing articles on what may be termed stock subjects. No one cares to know the opinion of a young, inexperienced, and absolutely unknown writer on "The Equality of the Sexes", or is concerned with her critical estimate of George Eliot's earlier and later styles. Nor, if she will be advised, will she try her luck with a sentimentally "picturesque" paper on "Autumn Leaves" or "The First Rose". This sort of thing has been done, and done by abler pens, too often already. Let her write articles on these subjects by all means, and on as many other topics as she pleases, for it will afford her excellent practice, but such papers must be reserved for her own edification. They have no market value, and the beginner must, beyond all things, aim at writing what will sell. When she has attained success she may write to please herself, but not before.

How to Begin.—The novice, then, should begin by taking stock of her surroundings, the incidents of her everyday life, and considering her own

special tastes. Let her think how best she can make use of the materials which lie ready to her hand. If she thinks she has a gift for short-story writing she may attempt a few brief sketches of the phases of life she knows most thoroughly, not of that mysterious "society" of whose ways and customs she probably knows nothing beyond what she has learned through the medium of the halfpenny papers. Short stories not exceeding 2500 words in length, and of average quality, are always in demand; and the standard of merit in many of the second and third rate penny weeklies is certainly not high.

Although stories are not, in one sense, journalism, the Authors' and Journalists' Boards of the Lyceum Club define a journalist as a writer who has dealings with editors, an author as one who has dealings with publishers. Journalism in the stricter sense of the word, as interpreted by the daily papers, is not a home occupation, but includes reporting, paragraphing, attendance at social functions, visits to the office; and it calls for the whole time of the journalist. Home-journalism is less exacting, and, of course, less remunerative.

The causes of rejection are many and various, but the fact that a manuscript has been rejected by a dozen editors does not necessarily prove that it is bad. Still, if an article has been submitted many times fruitlessly, and its author has no reason to think its failure is due to an unfortunate choice of journals, she will do well to put it away for a few months. Probably she will then be capable of a more dispassionate estimate of it, and the experience she has gained in the interval may enable her to see wherein its weakness lies and to rewrite it with a better result. It is, indeed, best to lay aside any article for a day or two, and then to criticize it in cold blood.

But the young journalist must not devote the whole, nor half, of her available time to writing with a view to publication. She has much to learn. Probably she will have to improve her grammar, composition, and spelling, and become proficient in shorthand and typewriting. In addition she should make brief abstracts of every book she reads; she should study the best literary models, and she must write daily practice-articles to improve her style and to give her a better command of her own language. An excellent School of Journalism and Secretarial Training for Women is carried on by Miss Cartwright at 8 and 9 Johnson's Court, Fleet Street, London, E.C. The Principal is daughter of a successful publisher of various magazines, and is herself the editor of *Home Life*. Students are also trained for literary secretaryships, shorthand-typists, and business appointments.

It should be remembered that a good beginning is essential; the success of an article is sometimes due to the favourable impression created at the outset, in the first paragraph, even in the first sentence. And that first sentence is always the most difficult to write. Nearly as important is a good ending. An article or story that loses its interest as it goes on, and fades away into a vague and futile conclusion, will assuredly be unsuccessful.

When a manuscript is completed, and its "very last" revision finished, the writer should read it aloud (to herself, not to her family, for a too friendly audience is worse than none) and try to imagine what its effect will be on others. Will it make people laugh? Will it make them cry? Will it add to their information or give them something to think about? If it will do none of these things, then its failure is certain.

It is undoubtedly advantageous if a girl is able to take up some particular subject, such as cookery, gardening, or dogs, poultry, golf, games, &c. If she has a speciality of this kind she should spare no pains to increase her knowledge of it, reading everything that she can procure relating to it, making abstracts and taking notes, which must be carefully arranged and classified. Her knowledge, moreover, must be practical as well as theoretical.

How to Obtain Journalistic Work.—One of the ways for a beginner to get her manuscripts accepted, published, and paid for is to send them, and to continue sending them, to the editors of the various daily, weekly, or monthly journals, as the case may be. Private influence and personal introductions are not of such value to the success of a journalist as is popularly imagined. The choice of the paper or magazine is of the first importance, yet the novice often makes glaring mistakes on this point—mistakes which an hour spent in the nearest free library or a couple of shillings judiciously laid out at a news-agent's should render impossible. Not only must the style and general tone of the journal be considered, but the average length of its articles, so that there may be no danger of offering a contribution of 3000 words to a paper whose pages are entirely and invariably made up of articles of less than half that length. The ever-increasing number of penny weekly journals offers a big field for the enterprise of the young journalist; the threepenny and sixpenny magazines too are always open to consider new ideas, and their editors have no prejudices against unknown writers.

It is an error of judgment for a woman writer to confine herself entirely to women's papers. She should, if her qualifications admit, go further afield and try those catering for the general public. If the beginner has made some special subject her own she may reasonably hope to obtain, without a very long or arduous apprenticeship, regular and fairly well-paid work on a paper that has a department devoted to her particular branch. Perhaps she may be able to get in the thin end of the wedge by answering any queries carefully and promptly, if the paper is one of those that print questions from correspondents and accept answers from outside sources. For such replies she will receive no payment, but her name will have a chance of becoming familiar to the editor in connection with the special subject, and by and by a short succinct article may be submitted with a probability of its acceptance. In time she may get entire charge of such a department, her duties consisting of answering queries, contributing practical articles herself, reading and reporting on those from outsiders referred to her by the editor, and hunting up and noting any novelties

connected with her particular subject. Perhaps the chief objections to this class of journalistic work are, firstly, the slipshod style it is apt to engender; secondly, the way in which its threads are often interwoven with those of the advertisement department. "Introducing the names of advertisers" and puffing wares which she probably does not honestly admire, and which possibly she has not even seen, are distasteful tasks to a cultured woman.

Work on provincial newspapers is difficult to obtain and not invariably well paid. Most, if not all, of the minor country journals make up their "Boudoir Chat" or "Woman's Corner" out of cuttings supplied by press agencies. The most important papers usually have their own women contributors, but a beginner is scarcely likely to become one of these until she can show some specimens of work actually published. She may, however, if she has the opportunity, send in short brightly written notes on any event of general interest that comes within her ken. Such articles as these may eventually find acceptance and lead up to regular employment.

The idea of writing a weekly "ladies' letter" is one that always appeals strongly to the new hand. Yet it is a thing not easy to do really well. It calls for exceptionally acute powers of observation, a nice perception of what to select for description and what to reject, and a crisp and attractive style of writing. A letter which is a mere bald catalogue of shop goods is dull, and consequently has no market value.

Seasonable articles, *e.g.* "Christmas Customs", "Hallow-e'en Superstitions", are, if pleasantly written, often accepted by weekly journals of the "popular" type, provided they are sent in sufficiently early. The beginner is rarely aware how long before the date of publication weekly and monthly periodicals are made up.

Sell's "Dictionary of the World's Press" will be found useful for reference purposes by anyone taking to journalistic work.

Illustrated Articles.—Photography may form a valuable adjunct to journalism. A smartly written article on some comparatively little-known place, or one to which public attention has been attracted for some reason or other, will frequently, if accompanied by good clear photographs, have a chance of acceptance, when, if unillustrated, it would be promptly rejected. The rate of payment for articles with photographs supplied by the writer varies widely. Many periodicals pay for the space occupied by the illustration at the same rate as for the reading matter; others give from 2s. 6d. to 5s. for each photograph used. A few papers pay as much as half a guinea for photographs of special interest. The writer must distinctly understand that she may not illustrate her articles with other people's photographs except by express permission. It is not wise to fall foul of the copyright laws.

Remuneration.—It is almost unnecessary to say that the rate of payment varies as widely as do the scope and style of the journals themselves. The threepenny and sixpenny weekly papers, intended more especially for women's reading, pay from 7s. 6d. to 30s. a column; the daily papers from

20s. to £5, 5s. a column; the monthly magazines from 4s. to 21s. a page. And the method of paying differs as essentially. Some journals require an account to be delivered by the writer, giving title of article, date of appearance and length in pages, inches, or lines; others send out postal orders or cheques within a short time of publication without troubling their contributors; a few pay outside contributors at once, but the members of their staff only monthly or quarterly.

The amount a home-journalist may fairly expect to earn is a question which it is obviously impossible to answer definitely. Broadly, however, she may esteem herself exceptionally fortunate if she earns £10 in her first twelve months of work, and if after five or six years of steady, persevering, unflagging industry she finds she can calculate upon earning an average income of £120, she may congratulate herself upon having attained success.

Sending out MSS.—Inexperienced writers are far too fond of enclosing with their MS. a long explanatory letter. This is quite unnecessary. If a letter is sent at all, it should be as brief and business-like as possible, and, above all things, should contain no allusion to the circumstances which have impelled or compelled the writer to take up literary work. Such particulars are not likely to interest, and, indeed, are very apt to irritate, a busy editor.

MSS. for press should be written on one side of foolscap or post-quarto paper, with a wide margin down the left side; the sheets should be numbered, and fastened together at the top left-hand corner with a proper paper-fastener, not a pin or a bit of cotton. On the first page nothing more should be written than the title of the article, the number of words it contains, and the name and address of its author. The name and address should also be written on the back of the MS, where they will be visible when it is folded. The MS. should never in any circumstances be rolled. If the handwriting is clear and legible, it is not absolutely necessary to have the work type-written, although it is desirable. Many editors altogether decline to consider articles that are not type-written, but some papers will accept manuscript if it is very neat and clear. An addressed and sufficiently stamped stout envelope should be enclosed with the MS. for its return if not accepted.

As to the period that may be expected to elapse before the receipt of the verdict—that is yet another point on which it is impossible to give any certain information. Some editors return declined MSS. within a couple of days, others hold them over for weeks and months; a few never return them at all. Some notify acceptance promptly, but as a rule the author will know nothing of her good luck until the arrival of the proofs. Indeed, in the case of those journals that do not return proofs for the writer's correction, it is impossible to know whether an article is accepted or not, except by watching the columns of the paper. There are journals, too, that have a bad habit of holding over articles for a year or two, and then publishing them without communicating in any way with the author.

If nothing is heard of a MS. after three or four months have expired since its despatch, it is allowable, if not altogether advisable, to write a polite note to the editor enquiring as to its fate.

Authorship.—Nearly all that has been said with reference to journalism as a home occupation can be applied to the more ambitious profession of literature. Nowadays, indeed, the two are so intimately connected as to be all but indivisible. There are, however, a good many young writers who, despising what they are pleased to consider the dreary round of press-work, cherish ideas of publishing a book of verses or a novel which will take the world by storm, and fill their pockets with untold gold. Only bitter experience will teach the novice that poetry is the most unsaleable of literary work. Therefore, except in so far as it is excellent practice, the beginner will do well to put away all thoughts of verse-making. But for fiction there is always a market, provided that it is the sort of fiction that people want to buy, the fashionable brand in fact, for there are as decided fashions in novels as in hats.

Before putting pen to paper, the novelist must have in her mind an absolutely clear and definite outline, complete in every detail, of the story she has to tell. All the characters in it must be living entities, not mere shadows; she must be able to laugh and cry with them; they must be real companions in her daily life. When the story stands out clearly in her mind, she may write it down, in skeleton always to start with, if it is a novel with a plot of any degree of elaboration. She should not open with a long descriptive preamble—this style of beginning is out of date—but should dash boldly into the story at once, letting her characters tell their own tale naturally.

Mannerisms and tricks of diction should be watched for and nipped in the bud, for trifling faults of this kind have a tendency to become accentuated with time, until they seriously mar what may be otherwise an excellent literary style.

On no account should the inexperienced novelist allow herself to be persuaded into paying anything towards the publication of her book. If it has any selling value, sooner or later it will find a publisher who will bring it out at his own risk. If it is rejected by all the best firms, it had better be laid aside as a failure.

Literary Societies.—The young writer will be able to obtain much valuable counsel by joining the Society of Authors, the office of which is at 39 Old Queen Street, Storey's Gate, Westminster. The yearly subscription is a guinea. The majority of women writers, at any rate among those living in London, belong to one or other of the literary clubs or societies which have sprung into existence during the past few years. The Writers' Club, which has its head-quarters at Hastings House, Norfolk Street, Strand, has many members, and is more of a social than a purely literary institution. The Society of Women Journalists has offices at 1 Clifford's Inn, Fleet Street.

MARKET-GARDENING.

Fruit under Glass.—Whilst such fruits as apples, pears, peaches, and autumn grapes can only be grown at a profit by the most experienced gardeners and under favourable conditions, others, such as tomatoes, grapes, early strawberries, peaches and nectarines, can be made to pay well. Span-roofed houses or frames constructed to catch all the sunshine possible in winter, and with sufficient artificial heat at command, are essential to success.

Tomatoes are perhaps the easiest to manage, and most profitable, the British fruit being always preferred to the foreign. For early fruit, seeds should be sown in heat in November, and the plants grown in a light position in a temperature of 55° to 60°. When properly managed they should yield a first crop in May.

Grapes require a house to themselves if they are to be forced to ripen fruit in June; they should be planted in inside borders. They need skilful treatment, and therefore their cultivation should not be attempted unless experienced labour is available. Late grapes are much more easily grown, and if properly ripened they will keep well into the winter. The best sorts for market purposes are—*black*: Black Hamburgh, Gros Colman, Alicante; *white*: Muscat of Alexandria, Buckland Sweetwater, Trebbiano. Probably the most useful and safest grape for an amateur is Black Hamburgh.

Figs are not difficult to manage, and where space is limited they may be grown against the walls of lean-to houses. If grown in pots they require rich treatment, and plenty of heat when forced.

Strawberries grown in pots in the open air, and brought into a house or frame to be forced, are usually profitable. The runners should be potted in August in 5-inch pots, and stood on a coal-ash bottom till November, when they are safest in cold frames. In December they may be taken into a house kept at a temperature of 45° to 50° till the flowers push, when the temperature should be a few degrees higher. When the fruit is forming, a weekly dose of Clay's fertilizer may be given. Care in ventilation and watering is necessary. The best sorts for forcing are Royal Sovereign, Sir J. Paxton, and La Grosse Sucre.

Carefulness in gathering and packing is essential to the securing of good prices in the market for all fruits; it is therefore worth while to learn thoroughly how to harvest and pack fruit for market. Too little attention is given to this matter by British growers.

Vegetables.—Green peas are well worth cultivating. The ordinary greengrocer recognizes only about a month as the green-pea season—from the third week in June till the end of July. Before the former date they are "not in", and after the latter they are "all over". But the practical gardener knows that, with a little management, a supply may be had from the first week in June to the middle of October.

Many gardeners sow a few rows of early peas on a warm border facing south at the beginning of November, and if the weather remains fairly mild they speedily come up thick and strong. Some succeed by starting the seed in shallow boxes and transplanting the seedlings into the open ground when they are about 4 inches high. Severe and protracted frost and snow sometimes kill them, but they frequently survive even a hard winter, and come into bearing earlier than any others. By drawing up the soil on each side of the rows, so as to form a protecting ridge, the young plants have a better chance. Those, however, who do not care to run any risk will do very well by sowing in mid-February or early March, and going regularly on at fortnightly intervals. The best sorts to grow are—*Early*: American Wonder, Gradus, Ringleader; *Late*: Ne Plus Ultra, Culverwell's Giant, Stratagem.

The plan is to shell the peas, and sell them at so much per quart. Coffee or mustard tins or cardboard boxes can be utilized for sending them by post. A quart of shelled peas is an acceptable dish for a small family, and many ladies are only too thankful to get regular supplies of really fresh green peas delivered at their own doors, instead of depending on the green-grocer. Early and late in the season really high prices may thus be obtained, for customers soon learn to recognize the advantage of obtaining fresh peas, which moreover do not require shelling, and therefore, as compared with those sold in the ordinary course, represent a considerable saving of servants' time.

Salad-growing is another profitable branch of gardening, but it must be done with intelligence. There are whole counties where no more inviting lettuce than a large green "cos" is ever grown, and the shops are everywhere few and far between where a small, close-hearted, crisp white lettuce is procurable, though an occasional box of the French variety may be seen, and the average price is from 2*d.* to 3*d.* each. "All the Year Round" is an excellent sort of lettuce to grow. Considerable breadths of them should be sown at about fortnightly intervals, for they are good at all times. They may be grown in frames all the winter, and if well managed and carefully packed they fetch good prices. Some gardeners sow quantities in shallow boxes at the approach of winter, and place them under glass. When the leaves are large enough to have their distinctive flavour, they are cut for mixture with other salad herbs without waiting for them to form hearts.

Shallow boxes of cress should be sown weekly, the seed just scattered on the top. The box, covered with a piece of board, may be placed on the greenhouse floor. The seed germinates rapidly, and in a few days white stalks and yellow leaflets about half an inch high appear. The boards should then be removed and the box brought into the full light, and in three or four days the cress will be fit to cut. Mustard grows even more rapidly under the same treatment, and if both are to be used together, the cress should be allowed double as long as the mustard or rape, which is the so-called "cress" of the shops.

Another plant well worth growing is "lamb's lettuce" or "rosette salading", so popular in France for winter salads. It is quite hardy, and, though somewhat flavourless, is a great help when green stuff is scarce. Water-cress may also be grown in damp trenches. Chicory, endive, and even dandelion are worth attention in localities where salads are in demand. Celery, too, is a profitable crop, and so is horse-radish, which flourishes in any odd corner.

Parsley is in continual demand, and in hard winters is remunerative. April and August are the best months in which to sow it, the late crop requiring protection from frost. It is also worth while to have some large boxes of it.

Mint forces well in boxes on the floor of a greenhouse, and there is a strong market for it when early lamb makes its appearance. Radishes grown in frames are a paying crop when marketed in April.

French beans are easily grown in frames, or planted in boxes or pots to be placed in houses to fruit; with a little care they can be had in fruit almost all the winter.

If cucumbers are to be profitable they must be in the market as soon as salmon is in season. Later they are so plentiful as to be worth little, unless they are sold privately by grower to consumer.

Asparagus and sea-kale always bring good prices, especially the former, which is sold in bundles of 50 or 100 sticks. Sea-kale should be white. The whitening process is accomplished by covering the plants with pots or boxes, well heaped round with stable litter or dead leaves. Indeed, sea-kale may be forced quite well in a cellar, or under a stage in a greenhouse. In order to do this the roots should be lifted, placed in rows in a few inches of soil or manure, and kept moist. Chicory may also be grown as a substitute for sea-kale. It is growing in favour as a British dish.

Fruit.—Orchard fruit, cherries, pears, apples, plums, damsons, filberts, and cobs are perhaps most profitable when sold on the trees to a dealer. He sends his own ladders, men, and baskets, when the fruit is fit for market, and it is gathered and packed without any trouble to the seller. If there are any apples that repay private gathering and storing, they are Ribston, Cox's Orange Pippin, and Blenheim Orange, for which high prices may often be obtained in December. There is also a good market for early apples, such as Duchess of Oldenburg, Irish Peach, Stirling Castle, and Beauty of Bath. These are ready in August, when apples are not to be had from the ordinary sources.

Dealers are observant of crops, and if they see large strawberry beds or a considerable number of raspberry canes and black-currant trees, they are very likely to call in summer, and enquire if there are any to spare. In this case it is sometimes more convenient to sell to them than to employ outside labour in picking.

In laying out a garden for profit, it is much wiser to plant bush and standard fruit-trees than any others. They do not shade and keep the sun off other things; they come very early into bearing; the fruit is extremely

fine, and may be gathered by anyone without the aid of steps or long ladders.

Flowers.—Growing flowers for sale is to a great extent a winter occupation. In summer flowers are so plentiful that little, if any, profit can ordinarily be made out of them, though there are a few nursery-men who make a speciality of sending boxes of flowers by post from 2s. and upwards, and do a fair amount of business with private customers in large towns. The kinds they cultivate for this purpose are chiefly carnations, roses, and sweet-peas.

There is always a certain demand for home-grown flowers about Christmas, and afterwards until the beginning of Lent, as there are then a good many dinners and dances. Nothing pays so well then as roses, provided they are of good shape and clean, that is, not infested with green-fly. Stephanotis, or Cape jessamine, is also very popular, and a good house of this lovely and fragrant white flower is a valuable property, but one that takes a few years to bring to perfection. Lilies of the valley, either for cutting or in pots, which always command a good price in winter, force well. Gardenia, very late chrysanthemums, Roman hyacinth, eucharis, white azalea, arum lily, and camellias are good plants to grow for a supply of white flowers for church decoration for Christmas and Easter. Red flowers may be obtained from rhododendrons, azaleas, camellias, forced hybrid perpetual roses, and tacsania. A few large yellow daffodils are always worth putting into heat for early work. Tree and herbaceous peonies are also worth forcing for church decoration.

At Easter white flowers have a special value. Arum lilies sometimes fetch 6s. a dozen. They can be grown in large pots or even well-drained boxes, or it is worth while to make a border for them. They should be planted out in the garden during late spring and summer to recruit their strength, and brought back to their flowering places at the end of August. White deutzias, spiræas, and azaleas are also in demand, and if only cut flowers are sold all these plants come in again another year. Double white primulas are useful to cut from, as are single white primulas in pots. The latter are raised from seed which should be sown in the previous May or June, but the blossoms are apt to fall when cut. White hyacinths, white narcissi, and daffodils are most useful, and the bulbs, of course, may do duty again.

Violets are well worth growing for profit, the best kinds being—*double*: De Parma, Marie Louise, Neapolitan; *single*: Princess of Wales, Russian. They should, if possible, be grown in cold frames close to the glass. To ensure quantities of flowers, young plants must be put in thickly every year early in August. Frames previously used for cucumbers do very well for the violets. Old matting, carpet, or straw put over the glass in severe weather is all the protection needed. When the blossoms are over, the plants should be divided and put out in the open ground in a shady situation. Those that are not wanted need not be thrown away. A short advertisement in a gardening paper, offering them at so much per dozen

by post, will in all likelihood bring in plenty of prepaid applications for them.

Camellias are coming into fashion again; they are very hardy, only requiring plenty of room, a fair amount of root moisture, and protection from frost. The one thing they cannot stand is gas. They are essentially winter-blossoming plants.

White gardenias, which so many people now prefer to camellias, require stove heat, and are rather difficult to manage, though, when they like their position, and have exactly the right treatment, they bloom profusely. Good flowers in winter and quite early spring sometimes fetch as much as fourpence each, and even more.

Some cool orchids are easy to grow, and occasionally a good sum may be realized from their flowers. The best kinds to grow for this purpose are *Odontoglossum crispum*, *O. Pescatorei*, *O. grande*, *Cypripedium insigne*, and *Cælogyne cristata*. The blossoms last a long time in water, and unless absolutely crushed or torn to pieces they may be remounted and worn over and over again. At first hand each orchid, if of good quality, is worth a considerable price.

Pansies, wallflowers, and auriculas are the hardiest of what are called florists' flowers, and a good many people make a speciality of them, and cultivate them with a zeal that becomes almost mania. They may all be raised from seed, and anyone who establishes a name for special kinds is sure to get plenty of orders.

Roses on their own roots are profitable because they are so easily raised. Shoots that have flowered readily take root about August, and the cuttings can be planted very close together.

The cultivation of hardy bulbs, such as daffodils and tulips, may bring but small profit, but the returns are quick. It is most economical to cultivate them under trees, in an orchard for instance, because they are quite over before the fruit makes much show. The cut flowers always sell, and fresh bulbs form so rapidly from the parent ones that they speedily make a little stock-in-trade, while the old bulbs are all the better for the removal of the offshoots. Gladioli are now largely used for room decoration, and, as there is a great variety of colours, the bulbs are cheap and easy to manage, it ought not to be difficult to find a good market for the flower spikes.

Seeds.—Those who wish to make a speciality of seeds must be very exact and methodical. It is of the greatest importance that they should be kept pure and true to name.

The owner of a particularly fine white or red sweet-pea, for instance, must mark the blossoms and watch for the seed, and take the greatest care to keep them separate from the seeds of other sweet-peas. Some growers sell selections of six or twelve kinds, containing a little marked packet of each colour, at prices varying from 2s. 6d. to 3s. 6d.

Exactly the same applies to pansies and violas. Pure whites, bright yellows, and well-defined blues are highly valued for spring beds and

borders, but the colours must be distinct. A black viola is in reality a very dark purple, and makes little show in a garden, but has its value as a curiosity. Each seed-pod is triangular when it bursts, and contains a large number of small shiny seeds.

Auricula seed is much sought after by lovers of the flowers. Each plant must be very carefully labelled, as when the blossom is off there is no natural indication of the colour, and there is never a stray bloom as in the case of pansies.

Polyanthus seed and seedlings are pretty sure of a good sale. The laced varieties are the handsomest, but they are delicate and rather out of favour now, the big flowered sorts with strong colours being preferred. If the seeds are sown in August the young plants should be in good condition for spring beds, succeeding crocuses, and harmonizing well with dwarf scarlet and yellow tulips. Many people would gladly fill up their beds in this manner instead of leaving them bare till the season comes round for summer bedding-plants, if they only knew how easily and cheaply it can be done.

The seed of forget-me-not drop plentifully, and grow wherever they fall. It is therefore far easier, and more profitable, to sell the young plants than to collect the seeds.

There is generally a good market for young seedlings of foxglove. They make a charming show in early summer, and as they transplant freely they are easily marketed.

The seeds of white and rose-pink Canterbury bells are also worth saving. The flower has a strong tendency to revert to blue, which is the colour of the original type, and as anyone who buys a packet of mixed seed is not likely to get more than a very few white and pink specimens out of it, seed carefully saved from flowers of these colours is distinctly valuable.

Any quantity of Shirley and other poppy seed can generally be disposed of, as it is very light and few have the patience to watch for and collect it. Seeds of asters, stocks, pentstemons, wallflowers, antirrhinums, and tuberous begonias, if of a good strain, are easily sold.

To preserve and sell the seeds of ordinary vegetables requires a large space of ground, and few owners of gardens can do more than save and store enough seeds for their own use in the following spring. There are some things, however, of which one buys very few seeds for sixpence, though they are plentiful and always saleable if known to be of a good and reliable strain. Chief of these are cucumber, vegetable marrow, and tomato. Each ripened fruit contains a quantity, and if carefully dried, and sufficiently watered when sown, very few fail, and that can hardly be said of bought seeds. Probably that is because the temptation to mix old seeds with new ones is strong, and very few keep their power of germination beyond the first year.

The breeding of new varieties of plants has now become an important and lucrative branch of gardening. Specialists in daffodils, auriculas,

pansies, and carnations, among flowers, and in potatoes and apples, have had remarkable successes in breeding new sorts which sold for high prices. The art of crossing, selecting and fixing new varieties is a fascinating one, requiring much knowledge and painstaking effort. Breeders of orchids have obtained as much as £1000 for a single hybrid. Breeders of potatoes recently have scored almost equally well.

POULTRY-REARING FOR PROFIT.

Prospects of Poultry-Rearing.—There are very many opinions as to the profits to be obtained from poultry-rearing. While some show, on paper, most satisfactory balance-sheets, the farmer still protests that, carried on as an independent business, it is wholly unremunerative. Where a large rent for land, expensive houses and appliances, and a considerable weekly expenditure in wages enter into the scheme, it is often a dead loss; but there are other aspects to the question. People who put up their own houses and runs, grow their own green-stuff, feed and look after the fowls with intelligent interest and limit their numbers, often tell a different tale. The old Spanish proverb says truly, “the eye of the master fattens the cattle”; the majority of failures may be traced to the lack of the owner’s supervision.

It is often said that the millions of pounds paid to France, Spain, and Russia for eggs imported yearly into this country should be kept within our own land. But climate is much more favourable abroad, and the absence of damp, so fruitful of disease in English poultry-yards, is a large factor in the success of foreign egg-production. The system of collection, too, is well organized in France, buyers arranging their rounds so as to secure a regular supply of new-laid eggs for the great Continental merchants. Still, the future is not without hope for the poultry-farmer in Britain, provided that he be fairly near his market. If light railways or motors decrease the cost of carriage, and if a more careful choice of non-sitting fowls increases his stock of eggs, he should be able to have a fair share of this industry.

A pen of average birds should give at least 120 eggs each a year. If each hen costs 6s. a year, including all sundries, each egg costs but three-fifths of a penny. When one remembers that even in country villages those who wish for new-laid eggs have often to pay 1½d. or 2d. apiece, and that 2½d. and 3d. is a common charge in London during the winter months, there should be a good margin of profit, except for the most incompetent or wasteful of fowl-owners.

It is important to remember that a large increase in stock does not mean proportionate profit. Poultry-farming on a very extended scale has never yet proved successful; whether it may do so in the future remains to be seen. Buying young birds and fattening them up pays better, but the

expenses of fencing and housing, and the certainty that the land will become "chicken-sick", are sadly against profits if the outlay is great. Yet money is to be turned over by adopting the practice of a shrewd old farmer's wife, who owns that she has put by a comfortable sum from her poultry-yard during thirty years, because she has looked after it well herself, trusting no hired servants to handle her corn-bin, and used common sense.

If poultry is to be successfully reared and fattened for market, regular customers and cheap transit must be secured, and the middleman dispensed with. At Heathfield, in Sussex, a regular industry is established, and the number of persons who yearly engage in rearing and fattening fowls for market is proof positive that there is money in the scheme. Prices there range from 1s. 8d. in summer to 3s. 6d. or 3s. 9d. in early spring, when the January chicks hatched in the incubators well repay the trouble they have given. The charge of salesman's commission and carriage by rail comes to 2s. 6d. per dozen, while the London, Brighton, and South Coast Railway has a scale of 20s. per ton, and delivers over 10 cwts. The average cost of food for rearing is computed at 1s. per chicken, and for fattening at 6s. to 8s. per dozen. The Heathfield scheme can, in the home poultry-yard, be well carried out on a smaller scale with considerable profit.

Breeds of Fowl.—A very decided mistake is often made at the outset by the purchase of the wrong class of fowl. Cottagers have a strong prejudice in favour of heavily-feathered, large-limbed birds, but in rearing for the higglers the best breed is the Sussex, a large fowl with white skin, flesh, and legs. It is in three colours, red, light, and speckled. It is also advisable to run an Indian game-cock with coloured Dorking hens, and thus produce the best table poultry and gain higher prices. These chickens are rapid in growth, and make fine white flesh and plenty of breast.

If egg-production is aimed at chiefly, the Leghorn and Minorca are unrivalled for their laying powers, and as non-sitters; and if a non-sitter, fair layer, and good table bird combined is needed, the Houdans take a prominent place. Wyandottes, Plymouth Rocks, and Langshans are also good kinds, for they lay well, sit occasionally, and are very fair table birds. Orpingtons and Faverolles are good layers of tinted eggs, which command a better market than pure white. They are also good winter layers.

Keep them in a dry, warm house, and feed them regularly and liberally, remembering always that fowls dislike monotony of diet as we do ourselves.

Eggs should be collected twice daily—a sadly-neglected rule in many poultry-yards, leading to the sale of stale eggs at top prices, and the consequent falling off in custom.

Preparing Poultry for the Table.—"When fowls", says a leading authority, "are to be fattened for home consumption, three or four days' confinement and plenty of soft food, at least four times a day, will add to their weight; but for marketing purposes the fattening process is prolonged

in this manner:—The birds are put into a clean lime-washed pen, placed where the light is dim, for the more quiet they are kept the more flesh they produce. For three weeks ground oats mixed with skim-milk, and enriched with beef or mutton fat, form the staple food, thrice a day. During the fourth week the crammer is used. Objectionable as this is, it is indispensable if fat chicks are required, as the birds lose their appetite after having been penned up about a fortnight. No stale food must be left about, and if the pen floor is not made of laths which allow the droppings to fall through, it must be cleaned out with very great care.

The birds must be plucked while still warm, to prevent tearing the breast skin. For market it is usual to beat down the breast-bone, as this is supposed to increase the plump appearance. Some dealers plunge their poultry when plucked into scalding water, but the result is scarcely, if at all, appreciable; careful singeing is a matter of more importance. (See also "The Poultry Yard" in Vol. III.)

The word "higgler" is in common use in Sussex. It means the man who buys from the rearer and sells to the fatterer at a profit of 2d. per bird.

The Englishwoman's Year Book gives a list of organizations and poultry clubs devoted to special breeds. The University College, Reading, gives instruction in poultry keeping at its poultry farm, Theale, Berks. There are short courses of five weeks, and terminal courses of ten weeks; charges, respectively, £5 and £10. Pupils can be boarded from 17s. 6d. a week.

Publications.—*Poultry Management on a Farm*, by Sir W. Palmer, Bart. (Archibald Constable), 1s.; *Popular Poultry Keeping*, by F. A. McKenzie (Upcott Gill), 1s.; *Poultry Keeping as an Industry*, 5th edition, by Edward Brown (Edward Arnold), 6s.; *Pleasurable Poultry Keeping*, by Edward Brown (Edward Arnold), 2s. 6d.; *How to Keep Laying Hens*, by Major Morant (Upcott Gill), 6d.

SPINNING AND WEAVING.

To deal exhaustively, or even comprehensively, in one short article with all the different interests which merge themselves in the subject of hand-spinning and hand-weaving, is difficult. There was a time when this handicraft was all in all, but its supremacy gave birth to its competitor the power-loom. The revival and subsequent success of hand-spinning and weaving have been due, not to the endeavour to compete in the prices of the materials turned out by the power-looms, but to the superior workmanship of the hand materials.

At the beginning of the revival the question was how far it might be expected to extend, what were its limits, and what its possibilities. No one then would have believed it possible that the spinning-wheel and hand-loom in a few years would have not only their own estab-

lished small factories or centres in London and various counties, but that Government itself would be so satisfied with the excellence and thoroughness of the work being done that orders would be given to encourage it in the Colonies. Proofs of this can be given by the London School of Weaving at 28 Davies Street, W., which not long ago completed and sent out to Africa a large Government order of spinning-wheels, hand looms, and other accessories. The hand loom has been most successfully introduced into Government and Private Homes for Inebriates, the Feeble-minded, the Blind, Deaf and Dumb, and Workhouses.



Fig. 536A.—Spinning Wheel.

Given the possibility of obtaining good weavers, the proceeds of a hand factory are nearly as great as those of a steam one. The outlay in machinery in the former instance is considerably less than the latter, and the time and labour of getting the looms under weigh is, for short lengths, much greater in a power loom than in a hand loom. The working out of delicate patterns and effects is superior and richer when done by a good hand weaver than when brought out by a power or automatic loom.

A great advantage is that the outlay in starting a small hand-loom centre is so moderate. Good hand looms of hard, seasoned wood can be made from £4, and spinning-wheels from 30s., or nearly half that

price if the wood be unseasoned, which is not recommended. A small industry can actually be started for the sum of £40 or £50.

As to the cost of production, the average price of wool is from 10d. to 1s. per lb. Roughly speaking, a pound of wool goes to a yard of material. The price of washing, picking, carding, and spinning comes to another 1s. The cost of dyeing is from 6d. to 9d. per lb., which brings the cost of production to 2s. 9d. or 3s. 3d. a yard. When this material is sold it realizes from 3s. 9d. to 5s. and even 6s. 6d. a yard. There is not space to devote to the other branches of hand-weaving, such as lustres, linen, silk, &c., but their relative value is much the same as wool, except the last, which fetches a higher price. Art weaving and tapestry are still more lucrative, but these are probably better suited for those whose natural talent lies towards the higher branches of artistic development than to the ordinary weaver.

In regard to the all-important point, wages, what can a hand-weaver earn? Men who were skilled in their work were, and still are in certain firms, paid from 35s. to £2, 10s. per week. The payment is regulated by a well-known tariff, so many pence per yard for so many threads. For women hand-weavers no such extravagant earnings are possible, as they ought to do only narrow widths. Therefore 12s. to 30s. is the highest wage they can hope to get, 18s. being the average sum.

Another very serious point is good training. If it is only one branch that is taken up, *let it be thorough*. The shortest time possible, even for the simplest weaving, is a three months' course at a cost of £10, 10s. But it follows, as a matter of course, that the highest wages are earned finally by those weavers who have received an elaborate training, and can follow and work out elaborate designs.

A market for hand-made goods was at first very slow, owing to the cheapness of the materials turned out by the power looms, but, thanks to the continual exhibitions in London and other towns throughout Great Britain, there has been a good demand for the superior and better-made article. The superiority of work in the hand looms is a matter of positive proof, and is gradually becoming a subject of interest. The public is realizing that it is a case of quality as against quantity, of a high plane of superior workmanship against precise but automatic skill.

THE ART OF ILLUMINATION.

Prior to its deterioration in the fifteenth century, illumination was almost the only form of artistic expression in mediæval times; beautiful examples of it are left us in the old manuscripts of the monastic scribes. About the end of last century, however, in the hands of a few workers it sprang into fresh life. To those who have natural aptitude and artistic feeling, which alone can ensure success, and who are prepared to devote

to it patient study and practice, illumination offers an occupation and source of livelihood full of fascination and real interest, which contrasts happily with the monotonous routine of much mechanical work.

Any study of illumination must necessarily include the art of writing, the acquirement of a formal hand which shall itself be beautiful without the addition of decoration. This must be the first aim of the student, since any ornament added to a page in which the penmanship is imperfect can be only misplaced and wasted effort. In acquiring this most necessary foundation, students in or near London will find the greatest help in attending the classes held at the Central School of Arts and Crafts, 316 Regent Street, or at the Camberwell School. At both these schools the fees are very low, and fuller information could be obtained. To those unable to attend school, full and clear instructions in the whole process and in the materials required are given in a book by Mr. Edward Johnston, *Writing, Illuminating and Lettering*, price 6s. 6d. net, in the Artistic Crafts Series of Handbooks.

The materials are inexpensive; a complete outfit may be bought for about 10s., or even less. The length of training depends so much on aptitude and regularity of practice that it is difficult to fix any period; in most cases at least a year would be needed, often more. When proficiency has been acquired it is well to exhibit in some of the public exhibitions, especially that of the Arts and Crafts Society; and to seek election in the "Society of Calligraphers, Writers, and Illuminators". This society holds periodic exhibitions, and meetings where members are brought in touch with each other, and discussions on questions affecting their art and its conditions held. The annual subscription is 5s. These are the best means of attaining recognition and securing remunerative work.

There is a growing demand for artistically illuminated addresses, manuscript books, church services, &c., and a very profitable side branch in handwritten title pages, dedications in books, and advertisements, which publishers are largely substituting for the unsatisfactory limitations of the printers' type. Some firms offer regular employment at salaries ranging from 25s. to £3 a week, but the best illuminators find it more satisfactory to work independently, and readily obtain commissions, since good work creates its own demand. For the inefficient, in this as in any other craft or occupation, there is little hope, but for the work of those who are prepared to give real sustained effort there is a steadily increasing demand, and a reasonable profit; while by the producers of the most beautiful manuscripts and addresses very high prices are obtained.

ETCHING.

An etching is drawn with a needle on a metal plate which has been coated with acid-proof ground. The needle point removes the ground, and the lines so made are etched on the plate in a bath of acid which gradually bites away the metal. The result is a series of lines sunk below the flat surface of the metal plate to various depths and widths, according to the strength and temperature of the acid and the time of immersion. Those parts of the work—the sky, for example—which it is desired should be delicately etched are drawn *after* the stronger lines have had a long start, or (if all have been drawn at one time) are covered over with acid-resisting varnish at an early stage, while the other parts are allowed to continue biting. Afterwards the plate is cleaned, heated, the lines filled with ink, and a proof is taken. The weight of the press forces the paper into the hollow lines of the plate, so that a proof is actually a cast of the plate—the lines sunk in on it are raised up on the paper, besides being covered with ink. Next, those parts which are shown by the proof to be too deep or too monotonous are modified by pressure with a burnisher, and a special transparent ground can be put on protecting the original lines while permitting them to be seen through it. Thus new work can be added many times if necessary until the final trial proof gives satisfactory results.

Classes are held in a few schools of art and of crafts, and the student who has had three or four years of thorough art training may gain an insight into the practical work of etching in a couple of years more. *The Making of Etchings*, by Frank Short (Dunthorne, Vigo Street, W.) gives fullest details.

The Ionides and other collections in the South Kensington and British Museums should be studied with particular regard to the quality of line in a good etching. Tools and materials are sold by several firms—J. Rhind, 69 Gloucester Road, Regent's Park; John Sellars, Arundel Street, Sheffield, Hughes & Kimber, West Harding Street, E.C.; Penrose & Co., 109 Farringdon Road, E.C., &c. A limited outfit to start with costs about £1. A needle may be improvised by setting an ordinary sewing needle in a handle. Copper ready grounded costs now about 4s. per lb. For copper, nitric acid, specific gravity 1.42 (1s. 2d. per lb.), with two parts water, is the mordant generally used.

The apparatus for printing is expensive, but a copper-plate printer will take proofs at a small charge per proof, and numbers of impressions can be taken from one plate. Etchings can be shown at any exhibition which admits black-and-white work, in Britain, and also abroad, where considerable interest is shown in British etchings. Also some publishers buy plates. As in other branches of art, it is impossible to predict what profit may be obtained. This must depend partly on individual talent and partly on good fortune.

COLOUR WOOD-BLOCKS.

Among the crafts which artists take up, that of printing in colour from wood blocks should have a popular and, perhaps it is not too much to say, a foremost place on account of the simplicity and moderate cost of the installation, and the beauty and importance of the results. A wide field is open to the artist in this delightful and ancient method. Its adaptability is also a feature, as great originality can be shown in the handling of it. A skilful craftsman, by experimenting, will always be finding out fresh improvements. The permanency of the results can be seen in the beautiful old prints of the Japanese.

It is not a cumbersome or unwieldy craft. The whole "plant", when not in use, can be stowed away in a small cupboard or box. A design of simple colour scheme can be produced from three or four blocks. In the first block everything is cut away except the line of the drawing. Impressions taken from this serve as a key for the colour blocks—a block for each colour. In printing, each block is coloured separately, and anew for each print, colours being mixed as required with a rice paste and water. Each print is a distinct artistic production, and not merely a reproduction of another. A quality is obtained impossible by any other means than printing from the wood on Japanese paper. Wonderful depth of tone, as well as very delicate effects, are equally possible, and if a print is compared with the original water-colour of the design, the water-colour usually suffers by the comparison.

The cost of materials is very moderate. Twenty-five shillings would cover the outlay on permanent requirements, and the Japanese paper, powdered colour, and blocks for going on with are not expensive. The method of printing is to lay a piece of damped paper on the block, and rub off the impression with a "rubber". This is a circular piece of leather, about 6 inches in diameter, slightly padded, and covered with shark skin. The tools for cutting the blocks are a knife copied from a Japanese pattern, and gouges and chisels of varying sizes, similar to those used in wood-carving and leather work. The usual wood is cherry. Ordinary water-colour brushes will do, along with a wide, flat one for large washes.

With a design simple in colour, of 4 or 5 inches square, a pupil can be taught the whole craft in three lessons of three hours each. After that, progress will be made with each set of blocks cut; and in printing, also, perfection will come with practice. The variety of treatment and subject to be attained is infinite, and hundreds of prints may be taken from one set of blocks. It will therefore be easily understood that the craft of colour wood-blocks offers very considerable chances of profits, and at popular prices. Every year the number of prints seen in exhibitions increases, and some of the printsellers in London and elsewhere are taking them up.

THE ART OF BOOKBINDING.

Bookbinding is a craft that, in its revival, has especially kept the old traditions. In spite of all the present-day inventions, no radical improvement has been effected in the early appliances; the sewing press, evidenced by prints at the museums, has remained unchanged since the sixteenth century. It is a handicraft which will prove fascinating and useful even to the amateur. To exercise personal taste in the binding of one's favourite books lends pleasure to the pursuit, and as a hobby its value is apparent. No special talent is required, the most necessary qualifications being application and perseverance. For those who have little desire for the more elaborate and decorative processes, there are the pleasing, simple linen bindings, and the half-bound library style.

The length of training will depend on whether the craft is to be learned as a profession or adopted as a hobby. In the former case a year should be spent in a thoroughly equipped workshop, and every day and *all* day should be given up to the work. A thorough training, such as has been outlined, would cost about £80. On the other hand, as a hobby, amateurs may gain sufficient knowledge to enable them to grasp the methods of bookbinding in a short time. Two or three lessons a week, with practice at home, would suffice.

For one who did not contemplate bookbinding as a profession, £6 would cover the initial cost of plant, tools, &c. The materials must be of the best, and hand-made, and so are naturally more expensive than those used for machine-bound books. The professional who intends to excel in the various branches of bookbinding must start with a fully equipped workshop.

By the merit and individuality of his work, combined with personal effort, the binder creates a market. Exhibitions in Britain and foreign countries are a means of bringing the worker before the public, and of making his work known. The books of long ago afford a special branch to the binder. The old, discoloured, torn, and stained volumes are, in the present day, washed, mended, and restored to their original appearance. In many cases the papers are so perfectly matched that the mending can scarcely be detected.

In a short paper, such as this, it is impossible to describe the various processes of the most simple work. Those who wish to acquaint themselves with the various styles of hand binding, from the plain linen book to the elaborate presentation copy, should visit a workshop, such as that of Miss Woolrich, 5 Bloomsbury Square, London. Here every branch of work can be watched in its practical processes, and information obtained as to the training, materials, &c., necessary for the craft.

METAL-WORK AND ENAMELLING.

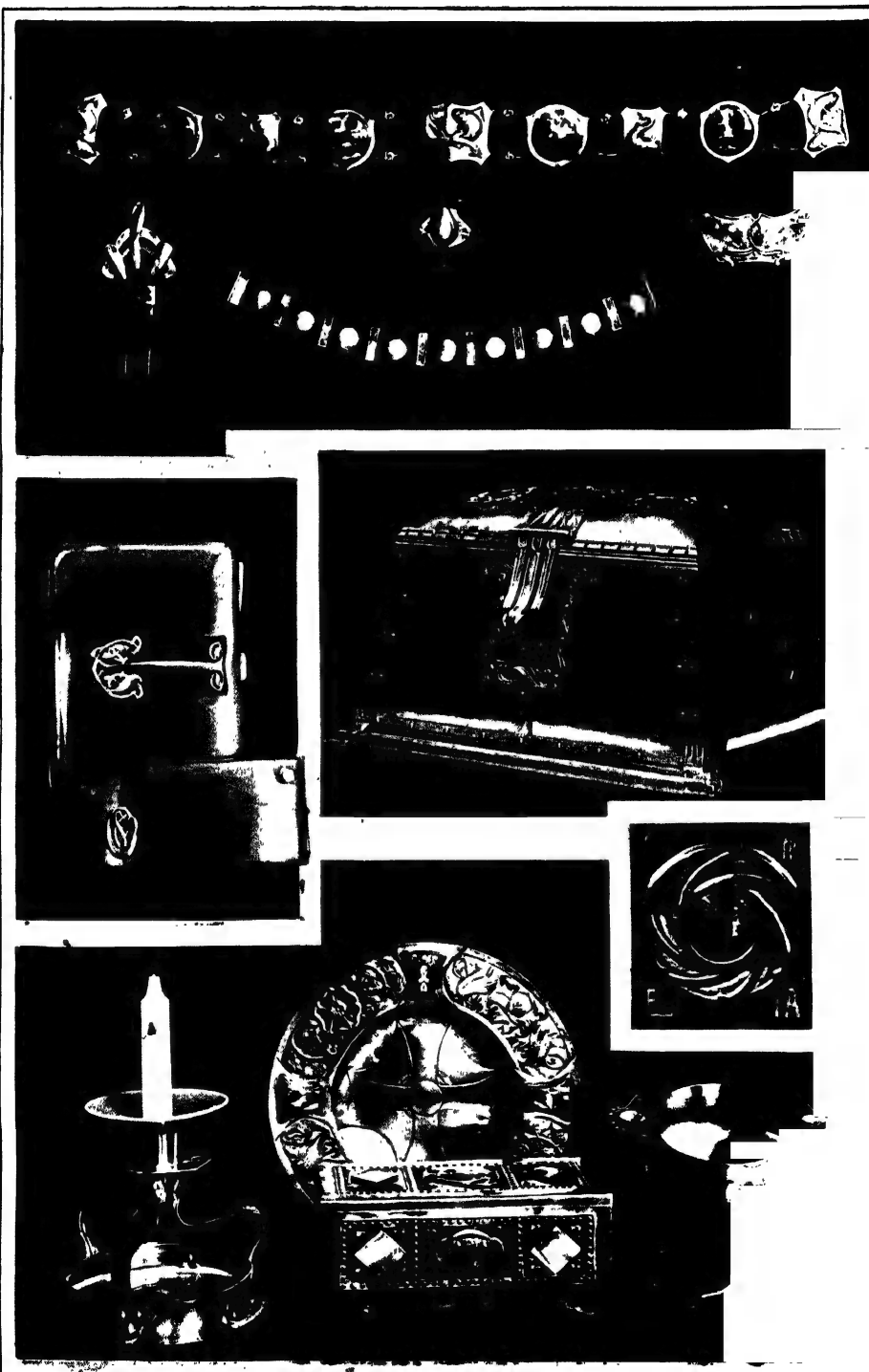
The number of women engaged in metal-work and enamelling is so large that it seems safe to say that it is a profitable employment. It should not be recommended, perhaps, as an occupation for girls who would be obliged to depend on their own efforts to maintain themselves entirely; but to any girl of artistic tendencies, who has the time and money to spend on the training, and need not support herself while she is working up a connection, it is the form of art that offers the greatest opportunities. It has also the following advantages: It can be done in an ordinary room, the outfit—especially if jewellery is the branch of work that is taken up—is neither very elaborate nor very expensive, and the outlay in working is not very heavy. Jewellery is certainly the branch that appeals most to women, and it is also the one in which they are most capable of excelling; but there are many things they can make very well for which there is a large demand, such as spoons, ash-trays, christening-mugs, boxes of all descriptions, flower-vases, cream-jugs and sugar-basins, &c. These can be made in plain metal—either silver or copper—or metal ornamented with enamel or stones.

For disposing of the work when made there are many opportunities. To begin with, there are art exhibitions all over the kingdom; each provincial town has one, and London, including the suburbs, has several. During her apprenticeship a girl should take note of all these exhibitions, and when she is competent to exhibit on her own account she should write to the secretary of the gallery to which she would like to send her work, and he will send her all particulars. In course of time, if her work is successful, a girl will get invitations to these galleries, and any expenses connected with fetching and returning work will be defrayed. Besides this outlet for selling there are also the shops. In London there are some that make a speciality of art metal-work and jewellery, and many others that are willing to take attractive articles on sale or return, provided that the price is not prohibitive and that there is a chance of making a substantial profit, for it must be remembered that a shop expects a larger percentage than a gallery. Of course a private clientele yields a larger profit than either, but it takes a certain amount of time and trouble to work up a connection that is large enough to dispose of all the work that one can do.

As a rule, women are better designers than craft-workers; but girls who wish to take up this work must remember that the competition is very keen, and becomes more so, and it is necessary that everything should not only be designed well but also well carried out and finished, as it has to compare with articles that are highly polished by machine in factories. Besides, useful things must be made for use. People will not buy salt-cellar, for example, that would get bent in cleaning, or a brooch that would fall to pieces after being worn two or three times, however pretty they might be. Beginners, whose friends have bought their work to encourage them

METAL AND ENAMEL WORK

- 1. Jewellery in silver with enamel and mother-of-pearl**
(By Miss M. Christine Connell)
- 2. Card-cases in silver and blue enamel**
(By Liberty & Co., Ltd.)
- 3. Silver and chiselled steel casket**
(By Alexander Fisher)
- 4. Panel from lid of "Ophelia" casket in silver and enamel**
(By Alexander Fisher)
- 5. Repoussé silver with pearl and enamel inlays**
(By Miss M. Christine Connell)



at the outset of their career, often get discouraged by having their work rejected or returned to them unsold because it is not up to the market standard.

It is therefore necessary that a girl should be well equipped before starting on her own account. There are two ways of training. One is to follow the classes in an art school, and the other is to serve an apprenticeship in a workshop where all articles are made for sale. The first is infinitely cheaper, for most of the art schools have classes both for metal-work and enamelling at an absurdly small sum, usually a few shillings a month. The two best in London are the County Council School and the school at New Cross. The teachers are good, and the student has the advantage of keeping all the work she does. But the training is necessarily slow, for the classes are held only once or twice a week, lasting two or three hours. On the other hand, in a workshop a girl can work every day and all day long if she wishes to do so, and she will get an insight into business methods, she will learn to do things with true economy, she will learn the approximate cost of production and the relative market value of her work, and, as all the work she sees produced will be for sale, she will learn to finish her articles properly. The premium may be high, but a capable girl, if she is also industrious, may easily learn in six months if she has some previous knowledge of design and modelling. A young girl, one just leaving school, would do well, however, to allow two years for the training. Workmen are, as a rule, jealous of their secrets, but most of the women workers of the day are willing to take apprentices. The metal-workers and enamellers form a large part of the artistic section of the Lyceum Club. The secretary of the Lyceum Club Bureau will give information as to those who are willing to take apprentices.

With regard to the outfit necessary for metal-work and enamelling, the cost is small, the most expensive item being the enamelling stove, which costs about £5. This stove is heated by gas, it is absolutely clean, and can be stood anywhere with safety, provided that it is not too close to a wall, has an outlet for the fumes of the gas, and has a thick piece of iron beneath the gas ring. The enamels are bought by the ounce, the price per ounce ranging from fourpence upwards. There are two or three hundred colours, as different ones are used for silver and copper; and there are two kinds of enamel—translucent and opaque. But an enameller soon learns to select the needful colours, and it is only an intricate piece of work that requires a large number of different tints. A pestle and mortar for grinding the colours, a few saucers to hold them when ground, a sable brush to lay them on, and a cake of gold paint for outlining complete the list of requirements. To these must, of course, be added the copper or silver that forms the groundwork of the enamel.

The outfit for a metal-worker, one who is going to do chasing or repoussé work, consists of two or three hammers, costing about half a crown a-piece, a dozen or so of tools, costing about sixpence each, and a pitch-block. In addition to these a few files, a fret-saw, a pair of shears,

a vice, and a blow-pipe will be necessary, and also one or two stakes for shaping bowls and hollowing the centres of plates and trays.

The accompanying illustration (fig. 537) gives an idea of the tools that are used for chasing and repoussé work. These are the most necessary, and can be obtained at the shop that supplies the rest of the materials for metal-work. It is better, however, for everyone to know how to make their own tools, for it sometimes happens that a certain piece of work will require special tools which have to be specially made. The tool-shops supply

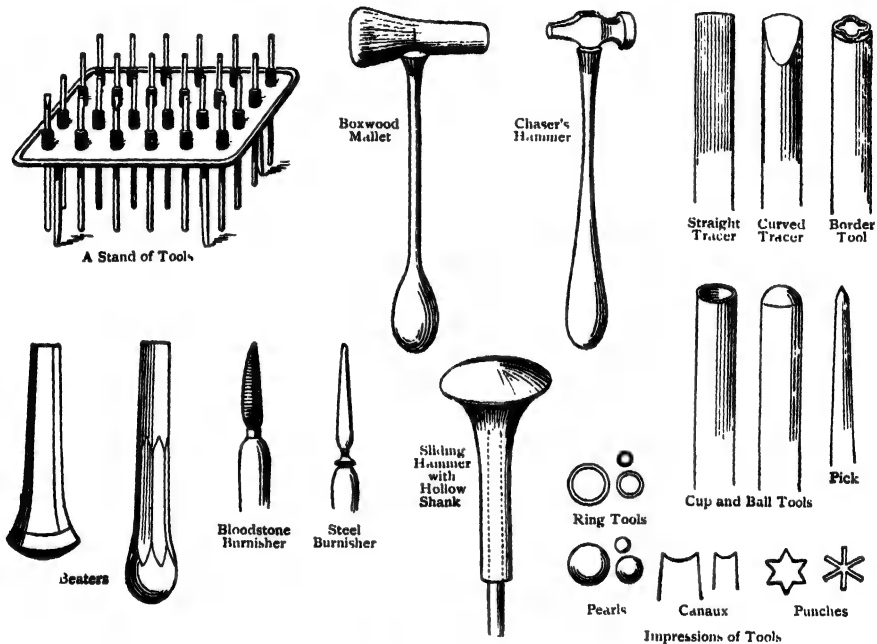


Fig. 537.—Tools for Chasing.

bars of iron of varying thickness, out of which it is quite easy to shape tools by means of a grindstone. Many people prefer to make their own tools, as a hand-made tool is much more sympathetic to work with; and it is worth the trouble, for a tool lasts a lifetime.

So far as the income is concerned, it is impossible to say exactly how much a girl can earn by metal-work. It depends entirely on the girl; one who worked slowly, or could only work for short hours, would not earn so much, while one who could introduce figure-subjects into her work would earn more, but a girl of average capacity would earn about ten shillings a day. A certain amount, too, depends on the design. Very often the simplest design is the most effective; it is therefore the most remunerative, because it is the easiest to carry out. As a matter of fact, the success of a metal-worker depends largely on her capacity for design. Everyone is on the look-out for novelties; but as the public taste is slow to change,

novelty in design should be original without being *outré*, should be quaint without being ugly.

LITHOGRAPHY.

Lithography, which in France is regarded by artists as one of their parts of speech, has not, until recently, formed part of the curriculum of the Art School in this country. It is true that many of our celebrated painters have practised it, among these Whistler. The London County Council has lithography classes in three of its Polytechnics—in Chelsea, Regent Street, and New Cross. These classes are taught most efficiently, pupils being instructed to draw direct on the stone from life. This necessitates a previous art training, since corrections are not easily made, but elementary students may begin with still life.

A specially prepared paper is sold, which can be drawn on with the lithographic chalk, and transferred afterwards to the stone for printing. Mr. Thos. Way, 6 and 7 Gough Square, E.C., who sells all materials for lithography, keeps a good paper for this purpose. Most artists prefer working on the stone, where possible, but for out-of-door work paper is useful on account of the weight of the stone. The cost of materials is not a serious matter. A box or two of Korn's lithographic crayons, a knife, and a stone are all that are required by the beginner. It is most important that the knife be sharp for erasing, and for this purpose an oil-stone should be added to the outfit. The lithographic stones vary in price, according to size. One 9 inches by 12 inches would cost about three shillings, larger ones double or treble that price. Stones can be used any number of times. After the requisite number of impressions have been pulled, the surface is rubbed down with sand. Artists usually entrust this part of their work to an artisan, the cost being one and sixpence per stone.

At the Polytechnics mentioned a printing-press is kept for the use of the students, since it is essential that they should have a thorough knowledge of the process—both of black-and-white and colour. A small sum is charged to those who work at home, which includes the use of the press, cost of paper, ink, and other materials.

The length of training required must, in a great measure, be determined by the knowledge of drawing the student possesses, and the ability displayed by him during the course. The average art student should acquire a fair knowledge of lithography during a course or two of twelve lessons, but, as in all crafts, it is only by practice that facility is obtained.

Lithography is an excellent medium for small portraits. It has a distinct advantage over the oil or water-colour painting, in that numbers of impressions can be taken from the original. The auto-lithographer, whether in black-and-white or colour, should have no difficulty in finding work, since for a modest sum the art lover can possess a really good thing.

The Chromo-Lithographic Art Studio (Incorporated), 24A Gloucester Street, Queen Square, London, W.C., was established in connection with the Royal Female School of Art for the instruction and employment of women in chromo-lithography. There are four terms in the year, entrance being possible at any time, and classes are held daily, exclusive of Saturdays. The fees are twelve guineas per annum, three guineas per term of ten weeks, and half a guinea entrance fee.

THE FIRST BABY.

THE CARE OF THE MOTHER'S HEALTH.

Both the mental and physical well-being of a child are influenced by the mother's health before its birth. This is a very important fact for young parents to bear in mind, and it is one that is too often overlooked. The child's only nourishment is derived from the mother's blood, and therefore the purer and richer her blood, the better will it be for her child.

Food.—The food of the expectant mother should be nutritious and digestible, but not rich. Rich food may be nourishing in quality, but generally causes indigestion, and is therefore to be avoided. Food that is distinctly fattening, such as potatoes, sweets, rice, beer, and stout, should be taken in moderation, as it is injurious to women to become very fat at this period. The food should be of a kind to make flesh, not fat. The best kinds of food for this purpose are meat, fish, game, poultry, eggs, brown bread, oatmeal-porridge, and milk; the four latter contain a considerable quantity of the lime and mineral salts so valuable in the formation of bony structures. They are very important for strengthening the growing bones of the child. Fruit and vegetables can hardly be eaten too freely. If they produce diarrhoea, however, they must be discontinued, as this ailment is very weakening, and should always be checked. Rest in bed, with a diet of boiled bread and milk or arrowroot and an aromatic chalk mixture (any chemist can supply this), will speedily cure the trouble when it arises.

Constipation at this time is particularly injurious. It can generally be prevented by eating oatmeal-porridge, treacle, honey in the comb, and plenty of fruit, vegetables, and brown bread, and drinking water freely, using cocoa, coffee, or chocolate instead of tea (which is an astringent). The simple plan of drinking a tumbler of water (either hot or cold) before going to bed and the first thing in the morning will frequently overcome constipation. Dr. Lauder Brunton recommends a pleasant and simple remedy for constipation, which is very suitable for delicate women and children. He says: "Take a few senna leaves or pods, put them in a muslin bag, tie up the end, and drop it into a pan in which prunes are stewing. The active principle of the senna (cathartic acid) dissolves, and so both the prunes and their juice acquire a marked laxative action, much stronger than they would otherwise possess." If aperients are needed, the safest and best are compound liquorice powder, confection of senna (of which take a tea-

spoonful before breakfast), granular effervescent citrate of magnesia, or castor-oil. The latter, however, has a reactive tendency.

Pure Air.—The oxygen of the atmosphere is the chief purifier of the blood. In stuffy, ill-ventilated rooms it exists in a much smaller quantity than in the open air. Nothing is better for the health than living much in the open air, since only thus can a proper supply of oxygen be obtained. The more time the expectant mother spends out-of-doors in fine weather the better. She cannot have pure blood if she lives in badly-ventilated rooms. She will be repaid for staying away from crowded parties and stuffy drawing-rooms by the increase in her own and the child's health and vigour. Sitting up late at night in over-heated rooms is very pernicious, and before the birth of a child should be studiously avoided, as plenty of rest lying down is very necessary. Over-fatigue does a great deal of harm at this period; on the other hand, exercise should be taken every day, but it must not be of a kind to strain or exhaust the body in any way. Walking is the best sort of exercise that can be taken.

Quiet.—All shocks, excitement, and mental distress may do serious mischief to mother and child. The mother ought also to take her part by cultivating in herself that calmness and cheerfulness which are essential, not only at this period, but equally so during the months after the birth of her child which as a natural sequence will be devoted to nursing it. Infants have an undeniable right to the food provided for them by nature, and it should never be withheld from them except for very weighty reasons and by the advice of a trustworthy doctor. The mother should take pleasure in performing such a duty, which, except under very exceptional circumstances, will lead to the best results, so long as she does not allow herself to worry about her child's trifling ailments.

Skilled Attendance.—The woman who cannot afford the services of a doctor is to be pitied, particularly when it is her first confinement. Every effort and self-denial should be employed to procure such attendance, because it is not true economy to save in this matter, by having a midwife. It is true the midwife must now by law be a trained and qualified maternity nurse, but after all her knowledge and experience must fall far short of the doctor's whose studies and practice have extended over a number of years. In confinements circumstances sometimes arise which demand a doctor's immediate attention, and if one is not in attendance valuable time is frequently lost. This delay may or may not be dangerous to the patient or the child; but at least it causes prolonged illness to the former as well as increased exhaustion to both. The feeling of confidence in knowing that medical aid is at hand is a wonderful help to the mother. Those nurses, too, who are most experienced and clever prefer as a rule to have someone to share the responsibility although they are qualified to undertake it.

THE BABY'S OUTFIT.

Clothing Required.—The error into which many young mothers fall when preparing a "layette" for a first baby is to make or buy far too many things. Of course, this does not very greatly matter when money is no consideration and things can be bought without the trouble of making them, but it is very different when means are limited, and shillings have to be expended with care, and the mother has to make the outfit herself. In every case it is worse than foolish to spend money upon buying, or time, trouble, and eyesight upon making, more than is really needed. Those who live abroad or in the country, and wish to buy the layettes all ready, can get lists of prices from any of the large well-known drapery shops (they all keep children's outfitting departments) by writing for them. The prices are much as follows. £6 for a simple, plain outfit, neat and nice, with just what is needful. £11, 11s. for one more complete, of finer materials, and perhaps prettier as to trimmings. £25 provides a very superior outfit, dainty and luxurious, including bassinette, mattress, and basket. Arrangements can be made for having

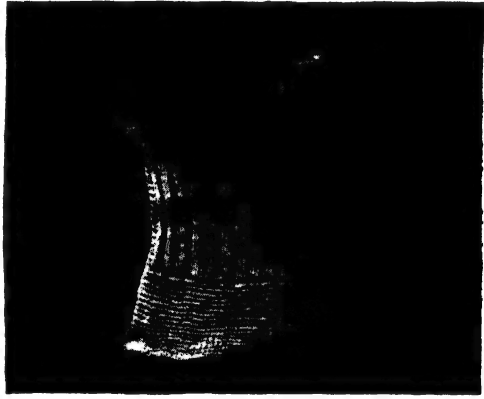


FIG. 533.—Baby's Knitted Vest.
(From Woolland Bros., Knightsbridge, London, S.W.)

any garments one fancies substituted from the other lists not chosen. If the little shirts, spencers, and boots are to be home-made, allowance is made for them. In every case it is advisable to have no Turkish towelling napkins cheaper than seven shillings a dozen. It is necessary that the material should be good, and in the end it is more economical as it wears very much better, besides being more absorbent. The woven cotton swathes on the lists are not necessary.

The knitted jacket is very necessary for baby to wear out-of-doors, under the shawl or cloak, and should fasten at the back. It is a dainty little garment when knitted by clever fingers in fine wool, but these spencers are not required for indoors except an infant is exceptionally delicate. There is no need for the stiff webbing bands in which some people encase the baby's middle, thus compressing the muscles, which should be left perfectly free. Great harm is done by binding and bandaging infants' bodies, under the erroneous idea that it strengthens the back or some other portion of the body.

Cost.—The amount of material required for making the baby's clothes, and the average cost, are as follows:—

	£	s.	d.
4 swathes (1 yard of soft flannel at 2s. a yard)	0	2	0
4 knitted vests at 9d. each	0	3	0
2½ dozen Turkey towelling diapers at 4s. 6d. a dozen	0	11	3
4 pilches (2 yards of flannel, a yard wide, at 1s. 6d. a yard)	0	3	0
4 long flannels (7 yards of 27-inch flannel at 1s. 1d. a yard)	0	7	7
6 monthly gowns (12 yards of nainsook at 8½d. a yard)	0	8	9
4 night-gowns (10 yards of flannel at 1s. a yard)	0	10	0
3 jackets at 1s. 6d. each	0	4	6
4 pair of boots at 6d. each	0	2	0
4 feeders at 4d. each	0	1	4
1 shawl	0	3	0
2 head flannels (each 1 yard square, of fine cashmere flannel, at 1s. 6d. a yard, to be embroidered with silk according to taste)	0	3	0
Hood or hat and veil	0	3	6
Cloak	0	7	6
Robe and under petticoat	0	7	6
Total cost	3	17	11

Turkey towelling diapers are much better than linen diapers, which should only be used when the infant is very small or if there should be any excoriation or "breaking out" on the skin. Soft old linen is the best for both these purposes. It is wise to collect all the worn table and bed linen available, and have a good supply of these useful articles made for first use and to be kept in reserve for emergencies.

Turkish towelling, being soft and absorbent, is the best material for napkins.

The mother, however, will make a note that all the nursery napkins, of whatever material they may be, must never be washed with soda, washing powder, or chemicals; nor must any of these things be put into the water in which the napkins are boiled. This also holds good for baby's other clothing, but is of paramount importance as regards napkins, if excoriations and breaking out are to be avoided. A good soap, such as the "Royal Primrose", is the best for washing these articles, and they should also be rinsed afterwards in four changes of water. Attention to this will repay the mother by seeing her child comfortable and happy.

The pilches (which are put over the diapers for warmth) can be made as



Fig. 539.—Baby's Jacket.

(From Woolland Bros., Knightsbridge, London, S.W.)



follows. A square yard of flannel should be cut into two triangular pieces; the base of each should then be slightly fulled into a band having a button-hole worked at both ends, and a button should be stitched on at the pointed end opposite the base, so that the two ends of the band can be buttoned together on to it. A mackintosh pilch, or a square of mackintosh over the pilch, should never be used, for it is very injurious. In very cold weather one long flannel is not enough; it should be sleeved, and a second from the waist added. A very good plan, which will be found to save much trouble in dressing babies, is to make all the things opening the same way, so that when the swathe and vest are on, and the diaper and pilch in place, it may be possible without constantly turning the child to lay it into the long flannel jacket and gown.

Woollen Clothing.—Good nuns' veiling or viyella may take the place of nainsook or cambric, as these materials are light, warm, and porous, and wash well. For real usefulness viyella takes first rank and is a great boon to mothers, because, in addition to its other excellent qualities, it is unshrinkable, cannot irritate the most tender skin, and is not expensive in the long run. It is made in different degrees of thickness, so may be used for making every garment required in a layette—from the little fine vest to the cloak, hat, or hood.

Flannelette, being highly inflammable cotton material, is both dangerous and unsuitable for children's clothing and consequently ought never to find a place in the nursery. The cheaper the flannelette the more inflammable it is. Horrocks, who only makes the best and most expensive qualities, has done much towards lessening this danger, but it cannot be altogether avoided, and, after all, flannelette is cotton and is no proper substitute for wool. Economy sometimes leads inexperienced mothers into buying this material, which has been condemned over and over again by doctors and coroners, when poor little children have been burned to death, or badly injured, perhaps for life, through their flannelette night-gowns, frocks, or pinafores having caught fire.

In clothing the baby it is of immense importance to prevent the body-heat from being quickly lost and to preserve the skin from sudden chills. The heat of the body is not due to clothing, but is due to the chemical processes which take place in the body. Clothing, however, is



Fig. 540.—Baby's Hat.
(From Woolland Bros., Knightsbridge,
London, S.W.)

of great value for retaining the heat. For this purpose no other material is equal to wool, particularly knitted, crocheted, or woven, because air, especially stationary air, such as is confined in the meshes of loosely-woven woollen articles, is also a non-conductor. Therefore "cellular" (the Aertex) under-garments will be found excellent. It is well, however, to bear in mind that extreme delicacy or sensitiveness of the skin is generally set up by keeping the child too long in its bath, or too long wet while washing it, and in neglecting to finish the drying process of the little person with an extremely soft linen towel or napkin, which by preference should be old.

Bassinette and Basket.—The bassinette and basket will of course be all ready for baby's arrival. A wicker one can be had at a basket shop from 1s. 9d. upwards, but a really well made one of a good size costs about 3s. 6d. and a nice strong basket can be bought for half a crown. A folding stand for the bassinette is very useful; its price is from 10s. to 12s. This, of course, is not absolutely necessary, as chairs, or a bench, may be used instead, for baby's bed should not be kept on the floor. The air is not so good low down, and accidents are more likely to occur, if an older child or children should be playing about, or something may be inadvertently spilled on the cradle by the mother or nurse.

To trim the bassinette is pretty work and not so difficult as appears at first sight. Four yards of satin or cambric, either white, pale blue, or pink, will be required to cover the wicker work inside and out. The neatest way to cover the canes of the hood is to make a casing for them of the lining; or each cane may be covered separately, and shaped stripes put between them of a proper width at the top and narrowing to nothing below. The next thing is to cover all the lining with daintily gathered or pleated, clear, spotted, or sprigged muslin, net, or lace, good enough to work nicely, as this cover is to be made and finished separately so as to be easily removed. Four yards of material will be required for it, with eight yards of lace edging for trimming it and some ribbons to make bows or rosettes. A tiny hair mattress and a hair pillow will only cost a few shillings, and are much more healthy than feathers, and two pieces of the best mackintosh sheeting, to entirely cover the mattress, will be required, one to be in the open air, if possible, or near an open window, while the other is in use. This is of importance. Also there should be at least four pieces of blanket or very thick flannel, the same size as the mackintosh, kept for putting between it and the child, and these slips should be kept as dry and sweet as possible. Experienced mothers prefer buying a pair of good-sized cot blankets, to the small ones sold for bassinettes, as they can make them wrap over better and more cosily. Never should sheets be used in the bassinette, nor even in cots while the children are small, nor should there be a cotton coverlet. Wool only is permissible for use. One strong reason for not using a cotton or linen sheet is that a child may be suffocated by its face getting covered by it, or even by drawing part of the sheet into its mouth. With an all-wool blanket or flannel this is impossible, and here again must be sounded a warning against flannelette for blankets and covers.

The baskets will naturally be trimmed to match the cradle. To do this and make the cover to lay over it will take about two yards of the materials and quite four yards of lace edging, as the little pockets have to be trimmed and lace has to be sewn all round the cover as well. It should be furnished with powder box and puff, scissors, needles, and cotton, pot of best cold cream, pieces of soft old linen, a set of clothes for the first change, and a soft little hair brush.

THE NURSERY.

Choice of a Room.—There are, unfortunately, a few mothers who think that any room in the house will do for the nursery. "It is only for the children", and so they are relegated sometimes to the attics and sometimes to the basement, while the best rooms are kept for occasional use as reception or "spare rooms". Some people, indeed, seem to look on their children as so much lumber, to be stuffed away anywhere, so long as they are out of sight of visitors.

Now of all situations for a nursery, either an attic or a basement room is the very worst. Attics, being directly under the roof, are hotter in summer and colder in winter than any other rooms in the house, and extremes of heat and cold are very injurious to children. Basement rooms are often damp, are more exposed to exhalations from the earth than upstairs rooms, are generally near a dust-bin or coal cellar, and are almost always insufficiently lighted.

Parents should remember that children are like young plants, and cannot grow to healthy maturity without light and air, and that the more they have of these the healthier will they be, and the less will they stand in need of the doctor's attendance; hence a healthy nursery diminishes the doctor's bill. The room which is to serve as nursery should be both dry and light, facing south if possible, and not facing north if this can be helped, for the warmth of frequent sunshine is very desirable; sunlight, too, invigorates life, and further, as M. Pasteur showed, destroys noxious germs. A cheerful outlook is much to be desired in a nursery. In fact, cheerfulness should be the keynote of child life: cheerful nurseries, bright and gay surroundings, with nothing dull nor sombre, no fretful, complaining voices, nor perpetual fault-finding and incessant "Don't do this! Don't do that!" such as are constantly heard in some nurseries. It is better that the nursery should be neither on the ground- nor the first-floor. The higher one goes the purer is the air, and it is of the utmost consequence that the air should be of the purest and, not only so, but frequently changed. The necessity of having windows open to admit fresh air at night is almost too obvious to be dwelt upon. It is always possible to rig up curtains to protect the crib or cot from any draught, and in very cold weather the child must have not only warm, light bedding, but also warm, light clothing covering the whole body. But windows must be open.

Pure Air.—Dr. Angel Money says: "Ventilation is conspicuous by its absence in many nurseries; many day and night nurseries breed disease rather than children". If possible, the nursery should be large—1000 cubic feet a head is about the allowance of "air space" in a healthy nursery. If only small rooms are available, an effort should be made to give up two of them for the baby's use, one for the night and one for the day, since it is very bad for the infant to sleep in the room in

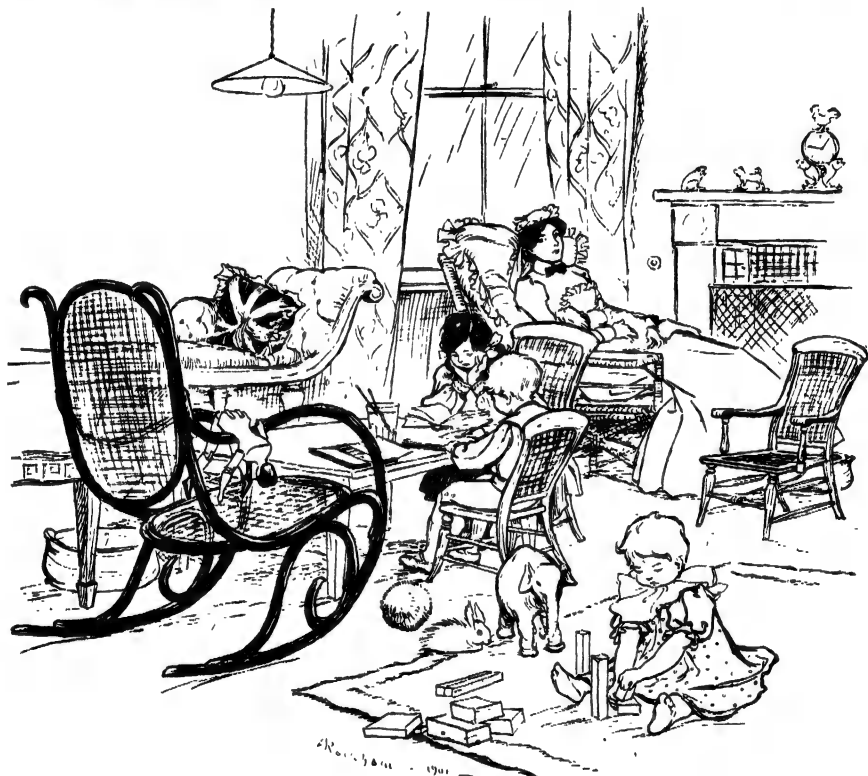
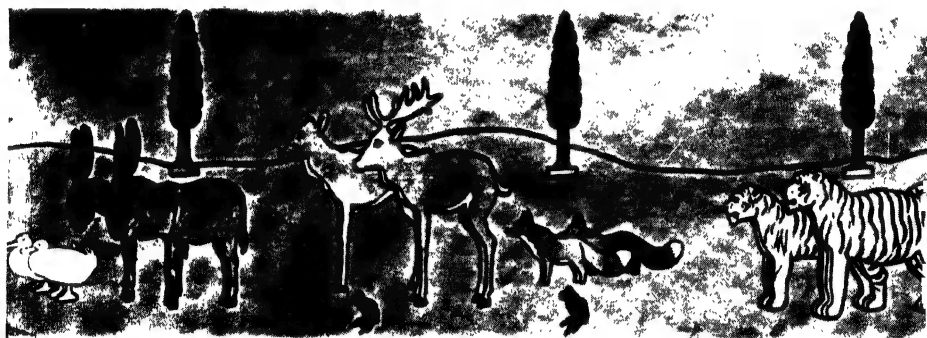


Fig 541.—Playtime in the Nursery.

which the nurse probably has to spend her evening with gas or lamp lit until ten or eleven o'clock. If the child sleeps in its parents' room, this difficulty, of course, will not arise, and the second room will not be necessary. If the child must sleep in the nursery, and there is no possibility of providing more than one room for it, then the nurse should sit in the kitchen or in some downstairs room in the evening, so that the air of the nursery may be kept pure for the night. Every occupant of a room uses up a certain amount of the oxygen, the purifying element of the air, and also contaminates the air by continually exhaling carbonic acid gas, which is generated in the body as long as the processes of life go on. Lamps affect the air in precisely the same way, and therefore a nurse working by lamplight three or four hours in the nursery after



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NURSERY

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the child is in bed vitiates the air very appreciably. These are physiological facts which it is highly important that every parent should understand. "A vitiated atmosphere", says Dr. Angel Money, "would cause certain death to infants by protracted poisoning: even an hour of it must deteriorate vitality."

No nursery can be healthy unless it is capable of being well ventilated; it should therefore have an open chimney, and windows that open at the top and bottom. The costless ventilator is an admirable contrivance. It is merely a stout strip of wood at least 6 inches high, made to fit into the window-sash. The lower sash is raised, the piece of wood fitted in, and the sash thrust down upon it. In this way a space is left between the sashes through which the outer air can enter, and so a constant supply of oxygen is admitted without draught. This system of ventilation is excellent for very cold and stormy weather, as it creates no draught, and keeps up a constant circulation of fresh air. It is not, however, sufficient: windows must be kept open, and as constantly as possible, the mother seeing to it that the child is kept out of draughts, and where the air cannot blow down on its head. Every time the child leaves the nursery the windows and door ought to be opened, creating a thorough draught, so as to completely air the room; and every precaution must be taken for the infant's sleeping apartment to be quite fresh, and well aired before bed-time.

Temperature.—There should be three thermometers in every nursery, one for the bath, another for the room, the temperature of which should not be allowed to fall below 60° F., and the third for hanging outside the window. The children's outdoor clothing should be regulated by the temperature of the day, not by hard-and-fast rules of season. The English climate is said to be a "parcel of samples"; we sometimes have a sample of January in July. The outside thermometer is often a safer guide as to the day's dress than the nurse's feelings. Some women always feel cold, and are prone to overload their charges; others are never cold, and err in the opposite direction. At the same time thermometers are not to be regarded as absolute guides. Cold is felt far more when the weather is windy or damp than when it is still or dry.

If the nursery must be at the top of the house, have the slates white-washed by a handy man; this considerably reduces the temperature of rooms situated directly under them. Size and oil mixed with the white-wash prevent the rain from washing it off.

Precautions.—Linoleum, and all cold oiled materials, have lurking dangers for small children, and are a fruitful source of infantile paralysis. Therefore a good warm rug or large shawl on a floor so covered is an absolute necessity, for an infant to roll about or crawl on. There should never be uncovered boards in any room where children are allowed to play. Cork matting is the best and safest material for covering them, but every child, when two months old, should have its thickly wadded rug on which it may lie perfectly flat and stretch its limbs in safety and, later on, begin to crawl and learn to use its legs and arms.

A gate with a bolt out of the children's reach should guard the top of the flight of stairs leading to the nursery. The fireplace in the children's rooms should be protected with a high fire-guard, and a bracket for lamp or candle should be placed on the wall high enough to be beyond reach of a child standing on a chair. Lights have a strong fascination for little people.

THE CARE OF THE INFANT AFTER BIRTH.

Warmth.—The most absolutely essential thing for a baby immediately after birth is warmth. Its body temperature at birth is about 99° to 100° F., but very shortly after it falls one or two degrees below normal.

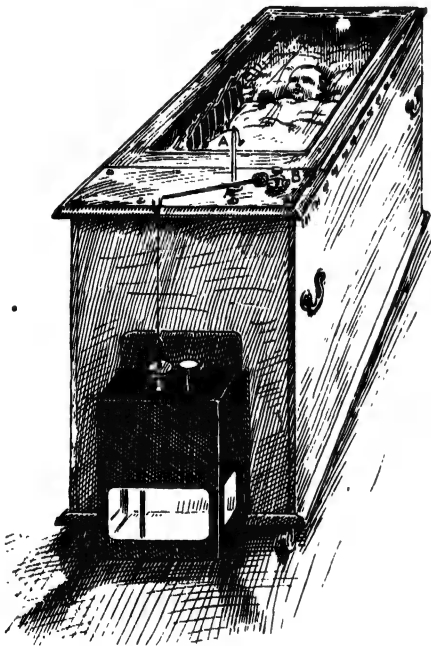


Fig 542. —Baby Incubator.

The purpose of an incubator is to maintain the temperature at a uniform level. In the form shown above, gas is used as the heat-giver. A thermometer is placed at A, and the indicator, B, shows the right strength of gas flame. The asbestos bell-shaped cover, C, hanging at the end keeps swinging above the flame when the gas is the desired strength. The holes in the side of the case are for ventilation purposes.

The normal, *i.e.* natural, heat of an adult's body in health is 98.4° F., but the temperature of a very young child is always a little higher and its pulse a little quicker than that of a grown-up person. If the infant is healthy and properly cared for, the temperature will rise again in a few hours to 99° F., at which it remains during infancy if the child is in health. It is well for people to remember this fact that the child's bodily heat lessens after birth, as they will thus feel the necessity for keeping the newly-born baby well wrapped up and in a room sufficiently warmed. The temperature of the room should never fall below 62° F. It may with advantage be kept a little above this. Babies born prematurely need urgently to be kept warm, their vitality being so feeble that cold soon kills them. They should be clothed entirely in cotton-wool and flannel. An "incubator" (fig. 542), in which they are kept continually at an even temperature, has been the means of

saving the lives of many premature infants.

First Things to be Done after Birth.—A large warm flannel, such as a petticoat or small blanket, or a woollen shawl should be in readiness to receive the infant directly it is born. The child should not be taken into the bare hands, as it may slip through them on to the floor.

The nose, inside of mouth and eyes, should then be carefully wiped with a clean, very soft rag to free them from mucus which, if this is not done, may be drawn into the air passages and interfere with the breathing, or in some cases may set up inflammation in the eyes.

A new-born baby can live for many hours without food; indeed food of any kind is absolutely unnecessary for the first twelve hours, but exposure to cold would soon prove fatal. It must therefore be kept warmly wrapped up out of draughts until the nurse is ready to wash it. The bassinette should be in a sheltered corner; the infant should be put into it, and not laid, as is sometimes done, on the end of the bed or on a sofa, where it may be sat upon or pulled by mistake on to the floor.

The first washing should be very expeditious, so as to avoid exposure. In cold weather it should be done before the fire, and a useful precaution is to surround the nurse's chair with a screen to ward off draughts. She should wear a flannel apron, and before washing should rub the infant all over with a little warm oil; this softens the curdy substance which is sometimes on a new-born baby's skin. The infant should then be well lathered from head to foot with a piece of soft flannel and soap and warm water, care being taken to use a pure soap that will not irritate its tender skin. It should then be plunged for a few seconds up to the neck in the bath (a big washing-basin is large enough for most babies), while the soap is sponged from head and face, after which it should be lifted on to a warm, soft towel and quickly dried. If any of the curdy matter still adheres to the skin, there is no need to spend time rubbing and picking it off, since it will do no harm, and will all come off with the next washing. The skin, particularly at the joints, after drying well should be dusted with Fuller's earth, or starch (finely powdered), mixed with an equal quantity of boracic acid powder. This is very cheap; half a pound will last a long time, and can be bought at any chemist's or drug-store for a few pence. A pennyworth of powdered orris-root mixed through it scents it delightfully. It may be mentioned in passing that this is the best kind of dusting-powder for toilet purposes. Sanitary Rose Powder, which is pure boracic acid, is also excellent, and is perfectly soluble in the bath water. The violet powder bought at hairdressers' should never be used for infants.

After the bath the navel-cord should be retied, as it sometimes shrinks after washing, in which case it may bleed. The flannel binder should only be fastened tightly enough to keep the navel-pad in place. The reason why it must never compress the infant's abdomen is given later.

A good plan of old-fashioned nurses was to give the infant when dressed a tea-spoonful of castor-oil. There is a very ready and general inclination nowadays to decry all old fashions as bad, and often to our cost. For this practice, which many young modern nurses condemn, our ancestors had an excellent reason, namely, that the intestines of the newly-born infant are full of a sticky, pitch-like secretion, which is principally bile secreted by the infant's liver before birth. This must be cleared away, or pain and screaming are sure to follow, and nothing clears

it away so well as a dose of castor-oil. It is absolutely safe to give, can by no possibility do harm, and saves much trouble. There is no doubt that the action of the mother's first milk is purgative, and intended by nature to clear this secretion away, but then the milk often does not come for two or three days, and meanwhile the secretion remaining in the bowels will set up pain and flatulency. The giving of gruel and mixtures of butter and sugar is, of course, to be condemned. Such things can only cause indigestion. If the child is uneasy after the first twelve hours it may be hungry, and a little boiled milk, well diluted with water and sweetened, may be given in a spoon every two hours till the mother can nurse.

Weighing and Measuring.—Scales should always be ready for weighing the infant either before or after the bath, and a tape-measure for measuring it. The dish of the scales should be covered with a piece of flannel, the weight of which and of the baby's wrap should, of course, be deducted in order to arrive at the child's weight. Both weight and length ought to be written down. The reason why it is necessary to ascertain the weight and length of the child at birth, is that in order to know how its food agrees with it, and how it thrives, we must know if it increases in weight. A healthy child gains from four to ten or twelve ounces a week during the first year. If there is no increase something must be wrong with the feeding, and it is most important to ascertain as soon as possible whether this is so by weighing the child regularly every week from the first. To wait until the child has become so light that its decrease is perceptible to those who hold it, is very probably to postpone till too late the remedying of the evil.

Babies always decrease in weight a few ounces during the first week after birth. After this the increase should begin and be steadily maintained. The average weight of new-born babies is from six to seven pounds. But healthy children sometimes weigh considerably more or less than this. The average length at birth is about nineteen inches. Increase in height and weight should go together.

THE FATHER'S DUTY.

There are two special duties towards young infants which have to be performed either by their parents or legal guardians, or, failing these, by the persons having charge of them. These duties are to register the birth, and to see that vaccination is performed by a doctor or by the public vaccinator. The duty of registration specially devolves upon the father. If it is impossible for the father or mother or legal guardian to register the child's birth, this can be done by the occupier of the house in which the birth took place, or by anyone present at the birth, or whoever has charge of the infant. Both registration of birth and vaccination are

compulsory by law (unless an exemption order be obtained for the latter), and can only be evaded at the risk of incurring a penalty.

Registration of Birth.—Births must be registered within forty-two days. This may be done by going to the Registrar of the district, giving him verbal information of the fact, and signing the register in his presence, in which case the registration is free of cost: or a written request may be made to the Registrar to come to the writer's house, or to the house where the child was born, and there register the birth, in which case a fee of a shilling is due to him. If the registration is delayed beyond three months, not only may a penalty of 40s. be imposed, but registration must be made in the presence of the Superintendent Registrar, with the payment of a fee of 2s. 6d. If delayed beyond twelve months, express authority for registration must be obtained in writing from the Registrar-General, and a fee of 5s. be paid. Neglect to register a birth is punishable by a fine not exceeding £10.

The child should be registered in his baptismal name. This is not required by law, as he may quite legally be registered in one name and baptized in another, but parents should remember that it is most important for everyone to be able to prove the date and place of his birth. For life insurance, for instance, a certificate of birth is necessary. Therefore it is always better to decide on the child's baptismal name and have that registered. It may save much confusion, trouble, and loss in after-life. If, however, a change from the name that has been registered should be desired later on, it may be inserted in the register within twelve months after the registration of the birth.

The Law as to Vaccination.—Vaccination is compulsory by law in Britain, and everyone taking the custody of an unvaccinated infant is obliged to have it vaccinated within three months (six months in Scotland) under pain of a fine of £1. The stringency of this regulation is, however, modified by recent Acts, which provide that no parent or other person shall be liable to the penalty before mentioned, if within four months (six months in Scotland) from the birth of the child he makes a statutory declaration that he conscientiously believes that vaccination would be prejudicial to the health of the child, and within seven days thereafter delivers the declaration to the vaccination officer for the district (the registrar in Scotland). Unfortunately this declaration is often made by persons who are influenced by a single case of illness following upon vaccination though not necessarily caused by it. Those who cannot afford to have their children vaccinated by their own doctor may have the vaccination performed free of charge by the public vaccinator of their own district.

Vaccination and Small-pox.—It is unfortunately true that the vaccination law is often evaded by people who live in lodgings and constantly move from place to place, and who are too careless of their children's welfare to see that this important duty is properly performed. Vaccination is also disliked by some people who imagine that it is useless as a protection against small-pox, or is fraught with some danger to the

child. It is a serious matter for any parents to take upon themselves the responsibility of leaving their children unprotected from small-pox. That vaccination protects from it has been conclusively proved. The following facts obtained by carefully-analysed statistics speak for themselves:—

1. Out of every three unvaccinated persons who are attacked by small-pox one dies; out of every two hundred properly-vaccinated people attacked one dies.

2. Soldiers and sailors must be revaccinated before entering the service, and their immunity from small-pox during epidemics of the disease is matter of common knowledge.

3. Before vaccination was introduced, on an average 40,000 people of all ranks died of small-pox in England every year. About one-third of the population was disfigured by the disease.

4. In 1871 vaccination became compulsory in England, and since that time the death-rate from small-pox has been reduced to less than one-third of what it was in the years just before vaccination was made compulsory.

5. In every epidemic of small-pox, it is proved that properly-vaccinated people escape attack in enormously greater numbers than the unvaccinated, and that any who do catch the disease have it in a much less virulent form, and escape pitting and disfigurement to a far greater degree, than those who have not been vaccinated.

6. No nurse at any of the London small-pox hospitals has died of small-pox. This is very remarkable considering the exceedingly contagious and dangerous nature of the disease. It can be accounted for, however, by the fact that every nurse must be revaccinated before entering on her duties.

7. The immense importance of revaccination as a protection from small-pox during adult life was forcibly demonstrated during the Franco-Prussian war. Recruits for the German army were all revaccinated, and when war broke out 216,426 Prussian soldiers had this operation performed. In France, on the other hand, only 40,000 soldiers were revaccinated. Small-pox broke out in the French army, and 23,469 soldiers died of it. The contagion from this terrible outbreak spread from Europe all over America, and even to the South Sea Islands. Naturally the Prussian soldiers were exposed to it too, but only 316 of them died. The disease, however, worked such dreadful havoc among the adult inhabitants of Berlin who had not been revaccinated, that the German government have now made revaccination compulsory upon all the population, and the death-rate from small-pox in Germany has now fallen as low as 0·3 per cent.

Importance of Thorough Vaccination.—It is an important duty for parents to see that vaccination is properly and thoroughly performed. Some people object to the doctor making more than one puncture, thinking that the pain is thereby increased. This is a serious mistake so far as the child's safety and welfare is concerned, since the very trifling pain caused by the operation is not to be thought of in comparison with the immense benefit of efficient protection from so terrible a disease as small-pox. In a pamphlet on "Vaccination and Small-pox", published by the National Health

Society and revised by the Local Government Board, the following valuable advice is given:—

“The degree of protection against small-pox is in direct proportion to the thoroughness of the vaccination, so that it is highly important that the operation should be done as soon and as effectually as possible. The best vaccinators make four or more insertions in the arm; and it is well to remember that whereas persons with this number of vaccination-marks die when attacked by small-pox in the proportion of less than one to every hundred cases, those vaccinated less efficiently die in a much greater proportion, so that people with only one mark die at the rate of fourteen in a hundred attacked. The too common practice of being content with one insertion in the arm is therefore to be strongly discountenanced. Partly because of the large amount of indifferent vaccination of the sort just mentioned, and partly because even the best infantile vaccination sometimes in process of time loses more or less of its effect, it is important that all persons who have been vaccinated in infancy should undergo revaccination on reaching the age of twelve. Revaccination, once properly and successfully performed, would appear to scarcely ever require repetition.”

NURSES.

A Nurse's Qualifications.—The most carefully chosen of all servants should be the nurse, because if she be careless and unprincipled she may do infinite harm, both physical and moral, to the helpless little creatures under her charge. There is one kind of nurse that no mother should ever count upon finding, that is, a person to whom all the care and management of the children can be handed over without requiring any supervision by the parents. Such a person occasionally exists, as probably also does the four-leaved shamrock, but it is not a profitable occupation to look for either. It is very unreasonable for a mother who neglects her children to suppose that a hired nurse will do her duty efficiently for her.

The most necessary qualifications to try and make sure of in a children's nurse are trustworthiness, good morals, and good temper. An unprincipled, untrustworthy girl is a very dangerous person to place in charge of children. She may hide falls or accidents that happen to them, take them into all sorts of undesirable places when they go out with her, give them spirits to make them sleep at night when she wants to go out, or keep them quiet by letting them eat trash. She may teach them to deceive their parents by frightening them into telling lies about her own conduct, and may drug and dose them—in fact, may cause an enormous amount of mischief. As regards the point last mentioned, nurses should never be allowed to take upon themselves to give alcohol, or indeed anything in the way of medicine, to children, merely according to their own judgment and discretion. A bad-tempered nurse who is constantly scolding and nagging often ruins

children's tempers, and by constantly and unnecessarily finding fault so confuses their sense of right and wrong that they grow not to care much what they do so long as they are not found out.

The Mother's Supervision.—The bathing, dressing, feeding, and general care of the children's health should always be supervised by the mother, until she finds from considerable experience that she can trust the nurse not to bathe them with the nursery door open, or put them to bed with damp hair (which is the cause of frequent ear-aches), or put on their clothes unaided, or let them bolt their food unchewed and so ruin their digestions, or talk and laugh with their mouths full at the risk of choking themselves, or eat and drink unwholesome things. All these are details which a careless nurse will neglect altogether, but a good one will attend to. The care of children's bowels is very important. Much ill-health is brought on by neglected constipation, and this is a matter which urgently calls for the mother's daily care. She should herself see that regular habits in this respect are strictly adhered to. If she entrusts such duties to careless nurses, she certainly will only have herself to blame for the evil results of their negligence.

Wet-Nurses' Qualifications.—While as a rule wet-nursing is better for infants than hand-feeding, because no artificial food can ever come up to that supplied by nature, nevertheless if the nurse is not a strong, healthy young woman, hand-feeding is to be preferred. Mothers should on no account engage a wet-nurse unless she has been examined and approved by an experienced doctor. This is most important, as she may be suffering from some constitutional disease which can only be detected by an expert.

A wet-nurse should not be under twenty nor over thirty, and should be a strong, cheerful, and healthy-looking person, with a healthy-looking child. Her hair should be glossy, her eyes bright and teeth sound, as all these characteristics are signs of health. If her child is puny and peevish, it need hardly be said that she ought not to be engaged. A peasant woman makes an infinitely better nurse than a town-bred woman. It is very important that the wet-nurse's baby and the baby she is to nurse should be nearly of the same age, because the quality of the milk alters almost every month, and to give a new-born baby to be nursed by a woman with a child seven or eight months old would be a serious mistake. Some doctors consider that a wet-nurse should not be engaged till her baby is three months old, as by that time, if there is any lurking constitutional disease in the child's system it will have shown itself, and so prove its mother unfit to be a wet-nurse. Professor M'Kendrick says: "In women the percentage of the casein (curd) and fat increases to the end of the second month, but the sugar diminishes even in the first month. During the fifth and seventh months the fat also diminishes, and the casein diminishes between the ninth and tenth months. The salts increase for the first five months and then decrease." Thus it will be seen that as the months go on, the milk becomes less and less nutritious. This is useful

knowledge, and should teach people how mischievous it is to prolong wet-nursing beyond at the furthest ten or twelve months.

A very fat woman rarely makes a good wet-nurse, and therefore should never be chosen. A weedy-looking, nervous, excitable woman is also very unsuitable. In fact, the more stolid and equable-tempered a woman is, the better nurse she makes, as excitement, anger, fretting, and worrying all seriously affect the milk and may cause it to disagree with the child. It is sometimes thought that brunettes make better nurses than blondes, but all the best medical authorities agree that complexion is of no moment, so long as the woman is of sound constitution and good muscular development and in good health.

Treatment of those Nursing.—The management of the wet-nurse is worth careful consideration, and what is said on this matter respecting her applies equally to the young mother who is nursing her own baby, for it is a fact that many women who could nurse well are from injudicious treatment rendered unfit to do so. First, it must be borne in mind that no food can nourish the body or be converted into milk unless it is digested. A very common mistake in the treatment of nursing women is to imagine that they have an unlimited capacity for eating and drinking rich food and malt liquors, and that in fact the more they indulge their appetites to excess the better will it be for the child. This mistaken opinion has ruined the nursing power of many a woman by upsetting her digestion, because once the digestion is upset, the milk disagrees with the child and causes diarrhoea and probably wasting, and eventually nursing has to be given up altogether.

Sometimes poor women brought into rich houses as wet-nurses are given three or four meat meals in the day, with stout in unlimited quantity, and the change from their usual frugal fare in a few weeks makes them really ill and unfit to nurse. The diet of nursing women should, therefore, be plain and wholesome, consisting chiefly of milk, porridge, eggs, bread-and-butter, oatmeal gruel, roast or boiled meat, with fresh-cooked vegetables, and above all things they must be persuaded out of the delusion condemned by all the best doctors, that malt liquors are good for nursing on. Women who are unable to nurse unless they take a glass of porter before the child has the breast have no business to nurse at all. What they are giving is not wholesome milk, and a baby cannot thrive properly on such food. If a woman is in a proper state for nursing, she only needs good food and very little, if any, stout in order to supply plenty of nourishment to the child and to sustain her own health. Besides suitable food, a wet-nurse, to do her duty by the child, urgently needs exercise and an open-air life. Women who lead "society lives", spending much time in crowded rooms, keeping late hours, and taking little or no physical exercise, are hardly ever able to nurse their own children, and country women taken from an active life and shut up in a nursery are materially injured as wet-nurses through want of exercise. Housework may with great advantage be done by the wet-nurse, but only provided she has plenty of time in the open air,

which is one of the best things for making good blood and good milk. A wet-nurse should not be allowed to worry about the welfare of her own child. Comfortable arrangements must be made for it, or her anxiety may injure her nursing capacity seriously.

THE CARE AND MANAGEMENT OF INFANTS.

Bathing.—One bath a day in soft water, temperature 100° F. in winter, 94° F. in summer, is absolutely necessary for babies from birth. More than one is injurious. When convenient, the best time for infants to be bathed is the morning, as the change to clean day garments has then to be made, and it is not possible to keep baby as sweet and clean by changing the napkins as constantly at night as during the day, and sponging the little creature. At night the whole body should be sponged well with soap and water before putting on the night-clothes. Older children may be bathed at bed-time, but the greatest care must be taken to have the hair thoroughly dry before they are put into bed. Neglect in this respect is a frequent source of ear-ache, and even of croup. Two rules to be strictly observed by those who bathe children are quickness and thorough washing. Afterwards the skin is to be quickly but thoroughly dried with soft, dry, warm towels. Then a soft, dry napkin ought to be used for the finishing process, of absorbing every drop of moisture from the ear, every fold of the ear, and behind it. The arm-pits, the throat, the creases of the thighs, between the toes and fingers, and under the knees, all require this attention before the child is powdered. Care in this matter keeps the skin in proper order. Of course the child is not to be fed before the bath, which is to be given so that the operation of dressing shall be finished as nearly as possible at the time the next meal is due.

To keep baby's mouth, nostrils, and eyes in a healthy condition, and to prevent thrush, soreness, or impeded breathing, there is a little performance which no good nurse will neglect morning and evening after the washing and dressing process is over. For this four small bits of linen are needed, old clean rag by preference. Each piece, before it is used, is to be dipped in pure cold water. One piece is twisted round the finger, and used to wash round the child's mouth, tongue, and gums. The next one is twisted to a soft point, and put up each nostril. The other two are for the eyes, a fresh one for each. It is doubled in two, and the double edge drawn very gently along the eye, getting in between the eyelids if possible. Each rag is to be destroyed when it has been used. When there is any soreness, a weak solution of boracic acid is to be recommended instead of cold water.

Fringed towels should be forbidden in the nursery. The fringe is liable to catch in the toes and fingers of the little ones, or in their nails. This is not only irritating, but frequently really injures a nail or even a toe, causing much unnecessary pain and trouble.

Precautions in Bathing.—It is likewise important that every precaution should be taken to avoid the risk of the child's taking cold from exposure during the bath. Thus Dr. Eustace Smith says with regard to this matter:

"The large majority of cases of heart disease are the consequence of rheumatic endocarditis (inflammation of a membrane of the heart) occurring in early life. The principal cause of rheumatism is exposure to cold, or to cold and damp. In young children and infants a very slight impression of cold may suffice to set up the disease. Thus I have known a young child exposed to draughts from the nursery door, while being dried after a bath before the fire, suffer shortly afterwards from stiffness and pain in the knees and endocarditis."

As the child is particularly liable to take cold when wet and naked, care should be taken before undressing it to lock the door so that it may not be opened and shut while the bathing is in progress. In cold weather a folding-screen is a great protection from currents of air. It should stand round the nurse's chair, shutting it out from door or window draughts.

Importance of Sleep.—There are persons who believe that a baby's restlessness at night is caused by its sleeping too much in the day, and they

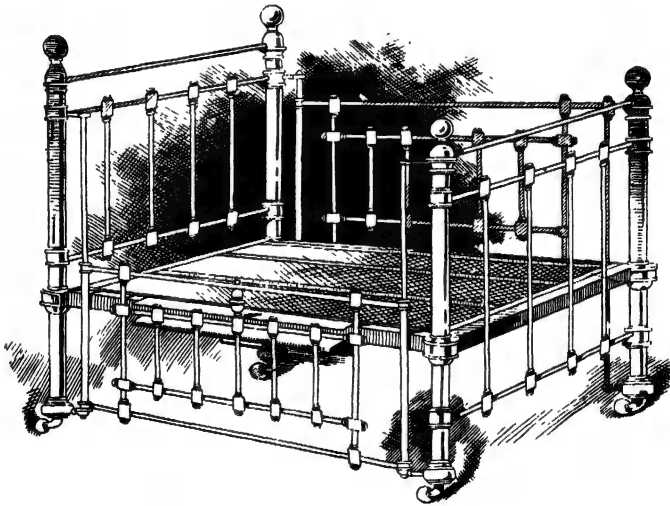


Fig. 543. — "Doris" Patent Crib. Side can be lowered as shown.

try—without much effect, of course—to rectify this by keeping the child awake in the daytime. It may be well, therefore, to impress upon inexperienced people that they need have no apprehension about a baby's sleeping too much. The more it sleeps both by day and night the better. During the first few months it ought to sleep the greater part of the twenty-four hours. If accustomed to regular hours of feeding, it will wake up of its own accord to be fed. Changing, bathing, dressing, and feeding take up nearly as much time as it need be awake. Want of sleep at night

is not caused by sleep during the day, but by hunger, pain, or absence of the sedative effect of fresh air. Babies kept in stuffy, ill-ventilated rooms are very likely to be wakeful. The more they are out-of-doors in fine weather, the more they will sleep at night. Fresh air tranquillizes their nerves better than anything else, and is far more useful for this purpose than any of the mischievous soothing syrups so much lauded in advertisements. It must never be forgotten that brain growth in infancy is very rapid, the brain doubling its weight in the first two years, and as during this period the nervous system, of which the brain is the centre, is in a very unstable condition, abundance of sleep and freedom from excitement are absolutely necessary.

Dressing.—The value of woollen material in the dressing of infants has been pointed out, but a few words must be said on two other very important points connected with the dressing of young babies, namely, the mischief of tight binding, and the danger of low necks and bare arms in cold weather. It is very necessary that infants should wear a flannel bandage round the abdomen for the first week or two; it is useful in keeping the navel-pad in place, but its chief purpose is to keep a uniform degree of warmth round the belly. These are the only two reasons why a swathe is necessary for an infant, but among ignorant people the idea prevails that the swathe or "binder" is required for the purpose of binding down the baby's belly and strengthening its back! Such an idea is absurd, and such binding is very injurious. The liver is much larger in early infancy in proportion to the size of the body than it is in later life, and the bony structure of the ribs and hips is smaller, and therefore the liver not having sufficient space causes a protuberance, which, however, gradually decreases as the child grows, because the size of the liver lessens and the bony cage of the ribs expands. It is, therefore, most mischievous to try and reduce this natural protuberance by binding it up tightly. All the organs of the body require free play if they are to be in health, and that important organ, the liver, especially needs it. A tight bandage round the middle also compresses the diaphragm (the muscle dividing the abdomen and the chest), and so interferes with breathing by preventing the drawing of a deep breath. It compresses the stomach (which is a muscular bag situated just under the heart) and prevents it from expanding properly when food is put into it, and thus often causes the child to vomit after it is fed. Finally, it compresses the muscles of the back, and so hinders their proper development, because muscles cannot attain their full vigour unless they are allowed to expand and contract freely. The healthiest children, and the children who have strongest and straightest backs and limbs, are those whose mothers do not try to improve upon nature's methods by cramping the fast-growing and developing body during infancy into stiff "binders" and "bodices", but who allow them to "sink or swell as nature pleases". Children reared in this way give infinitely less trouble to their parents than the poor infants who are bandaged so tightly that their digestion is injured and their blood made impure for want of "oxygenation" by proper

breathing, while their muscles are cramped by bandages and long, heavy "robes" that weigh down their tiny legs instead of letting them kick about freely.

Low necks and short sleeves are now seldom seen on infants in Great Britain; they were responsible for many deaths. Unfortunately some people cling to the old fashion, and even in these days, when so many understand the laws of hygiene, we sometimes see babies with bare arms blue from cold, and with necks and part of their chests exposed to draughts and chills, because their parents believe that such exposure makes them "hardy". Exposure of the vital organs to cold does not harden them, and to clothe part of the body warmly and leave the region of the lungs inadequately protected is further to expose the child to serious risk. It is a matter of simple experience that young children escape colds, bronchitis, the troubles of teething, and other infantile ailments much better when, without being coddled, they are clothed sensibly in long-sleeved, high-necked garments that protect them from the uncertainties of our changeable climate.

A physiological fact that should always be remembered is that "cold injures the nutrition of the bones". The body when exposed to undue cold does not develop as well as when warmly clad. An old Parisian doctor in the early part of last century said he could trace thousand of deaths of children to the then prevailing habit of putting babies into low-necked, short-sleeved frocks.

There are nurses who will keep a baby well and properly clothed until it is five months old, and then "shorten" it ruthlessly by cropping its flannel skirts till its legs are well exposed, and throwing away its flannel belly-swathe. The nearness of the critical period of teething, when a child urgently requires to have its abdomen and lower limbs kept warm, is not considered by them at all. Parents should therefore be most careful to see that the swathe is not dispensed with till teething is quite over; it is most useful in protecting the intestines from cold, and thus preventing diarrhoea, which, as should always be remembered, is often a dangerous complication of teething.

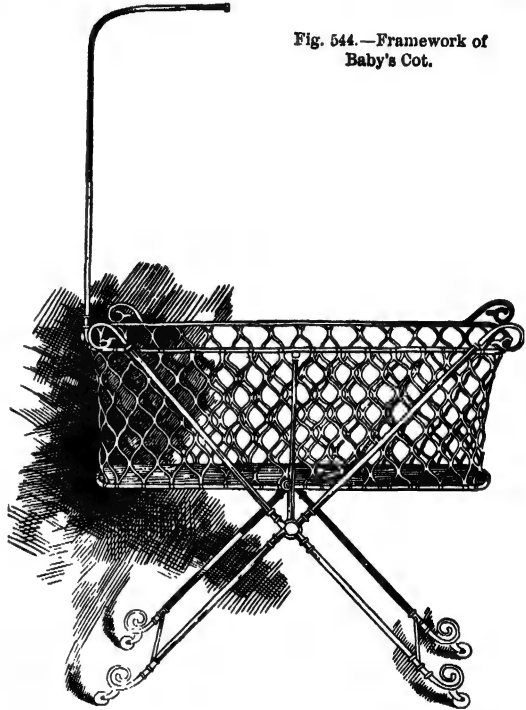


Fig. 544.—Framework of Baby's Cot.

Breast and Hand Feeding.—The essentials for establishing health are summed up by one of our cleverest maternity and child's doctors as—"Maternal care, pure air and sunshine, natural and plain food, prompt and skilful medical aid".

The natural instinct of maternity in a mother enjoying good health of body and mind is to nourish her infant from her own body. To do so is a sacred duty, but it is also a pleasure and privilege to nurse one's own child.



Fig 545.—Baby's Cot (Trimmed).

To renounce this duty for selfish reasons, such as the disinclination to be tied to the nursery at regular intervals, is to wantonly break nature's laws, which can never be done with impunity. Such a mother deliberately robs her child of that plentiful supply of nourishment provided for it by nature, and probably may, by substituting artificial food, deprive it of that splendid start in life which generally falls to the lot of children naturally nurtured by sensible, conscientious, and self-denying mothers.

There are occasionally grave and strong reasons why a mother should not nurse her child, and when it would be almost criminal for her to do so. The doctor must decide this

question. When there is actual disease, if the infant is strong and healthy it must be brought up by hand; if weakly and with but a small hold on life, if possible a strong, healthy, good-living wet nurse should be provided for the little one.

That strong healthy infants thrive and do well on artificial food, when every care is taken to have it as perfect as possible, is no argument that such feeding is equal to mother's milk, as no perfect substitute for it exists. For this reason the importance of keeping infants entirely on the breast for seven or eight months if possible cannot be over-estimated, and those mothers who are only moderately strong should insist on nursing their infants.

Mother's milk has so much to recommend it that it seems superfluous

to plead in its favour. Being nature's provision, it contains as a rule, in exact proportions, all the elements requisite to build up a strong, healthy body, with sound bone and muscle, and to give it the power to withstand and fight against disease.

If there is not sufficient milk, or if it is not rich enough to nourish the infant, cows' milk of the best quality procurable may be used to supplement it, and it is well to arrange for this food to be given alternately, at equidistant times, with the natural food.

Mixing the Milks.—Happily for the busy mother who has to earn her own living the old idea that to give other milk when she is nursing a child herself is injurious to it. On the contrary, it is an invaluable aid in cases of emergency, but on no account, except by the direct order of a doctor, should any other food be given, while the mother is nourishing it, than cows' milk or cream. A strong plea for natural feeding is that it is so absolutely cleanly. It comes direct from its source into the child's mouth; it is of exactly the correct heat; and, as it is quickly disposed of, and has not to be stored, there can be no contamination from carelessly cleaned utensils or other evils to which cows' milk is liable from the time the process of milking has been performed until it is ready for baby's bottle.

If for some weighty reason the baby has to be fed from a bottle, then the mother will naturally resign herself to the inevitable, and set to work to secure for her child the best possible food as a substitute for that supplied by nature for the use of children. This is cows' milk as pure, as fresh, and as clean as it can be procured, and instructions for preparing, and everything pertaining to infant's food, will be found in the following pages of this section.

While on the subject of milk, it may be useful to mothers living in London, where it is difficult to procure pure, rich, clean milk, to know that the Ideal Dairy Company provides it in sealed bottles, and their carriers deliver it in London and its immediate vicinity twice a day. Not a particle of cream is removed, not a drop of water added, nor any colouring matter, nor any preservative. The milk received from the farms twice daily is constantly being analysed to ensure its purity and richness in cream; and the farms are under the direct inspection of the company. The milk is cleansed from impurities by a special process, which can be inspected at the company's dairy, 222 Kensal Road, N.W. The bottles are washed, each time after being used, by special mechanical devices ensuring absolute cleanliness. After the bottles are filled, they are immediately sealed with a cardboard disc which cannot be tampered with, and over that there is an enamelled cap with spring fasteners, so that no foreign or contaminating substance can come in contact with the milk after it leaves the premises.

This milk has been found so useful in rearing delicate babies, who could not digest or thrive on ordinary milk, that it is being strongly recommended by more than one hundred and sixty London doctors. It can, however, as yet only be had in the immediate vicinity of London. It is exactly the same price as ordinary milk.

Unwholesome Diet.—It is very important that infants should be given suitable food. "A large proportion of the diseases of early life, some of the most fatal and some of the most lasting in their influence, have their origin in errors of diet", writes Dr. Cheadle. Mothers should remember that convulsions, diarrhoea, rickets, wasting, and all sorts of troubles of digestion, are caused by "errors of diet" more than by anything else. To some people it may be a surprise to learn that convulsions can be brought on by wrong feeding, and therefore it is very important to impress on the inexperienced the fact that convulsions in young babies are more frequently the outcome of indigestible food than anything else. Every dispensary doctor knows this fact well, and the tremendously high death-rate of the children of the ignorant poor is chiefly owing to the reckless way in which infants and young children are fed, no attempt being made to ascertain whether the food given them is suitable or not. Thus infants are quite unable to digest "sopped bread" and all starch-containing foods. To understand this is to know the alphabet of the science of infant-feeding. Bread, arrowroot, corn-flour, and in fact all "farinaceous foods", are principally composed of starch, and starch is digested by means of a special ferment in the saliva called ptyalin. Until the teeth begin to come the salivary glands hardly secrete any of this ferment, and therefore young infants do not possess the natural requisite for turning starchy (*i.e.* farinaceous) food into sugar, and unless in the process of digestion it is converted into sugar it cannot be assimilated and nourish the body. People who give "pap" and arrowroot and such things to young infants are giving them absolutely indigestible food, which too often brings on convulsions, diarrhoea, and other illnesses.

Nature indicates the proper food for babies, by sending it to the mother with her child. But too often nature's teachings are disregarded, and people imagine that milk, being a liquid, is not enough to nourish the child. Accordingly, they supplement it with all sorts of things which a young infant's stomach is quite unable to digest. Everyone should know this important fact, that milk contains all the elements of nutrition required by the body for the three purposes for which food is needed, namely, to replace the waste of bodily tissue always going on while life lasts, to make heat, and to evolve energy. To do these three things our food must contain five elements—water, albumen, fat, sugar or starch, and mineral matter or salts. All these are found in milk, and it is therefore a complete food in itself; in the words of Dr. Cheadle, "Milk is an absolute and complete compendium of all essentials of food. It is perfect in all points." Professor M'Kendrick gives the accompanying table of the composition of different kinds of milk, showing how they all contain these five elements in varying proportions.

Animal Milks Used.—The kind of milk to give the infant, either as a supplement to the breast or when it has to be fed entirely by bottle, depends, of course, on what can be obtained. In the great majority of cases cow's milk will be alone available. Goat's milk is excellent, but difficult for most people to obtain. As this table shows, it is very rich

and nutritious. Its curd, too, is very digestible; much more so than the curd of cow's milk. Ass's milk has a yet more digestible curd, but it is greatly deficient in the two important elements of fat and albumen. Hence, although it is sometimes very suitable for a time for weakly infants who are unable to digest cow's milk, its lack of fat and albumen causes falling off in the child's strength. It is very expensive as compared with cow's milk, and often cannot be obtained at all. Cow's milk is therefore what most people have to fall back upon when the mother cannot nurse, or can only do so in part; hence the importance of understanding in what particulars the milk of the cow and of the human being differ.

	HUMAN.	COW'S.	ASS'S.	GOAT'S.
Casein (albumen).....	2.45	3.34	1.70	4.20
Fat.....	3.10	3.53	1.55	5.80
Sugar.....	6.70	4.75	5.80	4.94
Salts.....	.30	.75	.50	1.00
Water.....	87.45	87.63	90.45	84.06
	100.00	100.00	100.00	100.00

Preparation of Cow's Milk.—It will be seen from the above table that in cow's milk there is a larger proportion of casein (albumen) and of fat and a smaller quantity of sugar than in human milk; there is also a slightly larger quantity of mineral salts. These differences are easily neutralized by adding water and sugar so as to reduce proportionately the casein and make up the sugar; the real difficulty occurs in dealing with the curd of the cow's milk, because it is of quite a different consistence from the curd of human milk. When milk reaches the stomach the casein in it becomes curd, and therefore to a certain extent solid, and this solid substance has to be dissolved and digested by the action of the gastric juice before it can nourish the body. If it is not so digested it will set up irritation and diarrhœa, and may even cause convulsions. The casein of cow's milk forms a stiff, tough curd, but the casein of human milk coagulates into a light, flaky curd, which is very easily digested. A very useful object-lesson in the nature of the casein of cow's milk can be obtained by mixing a tea-spoonful of vinegar in a couple of table-spoonfuls of milk and heating it. The casein of the milk will coagulate into a tough clot, which anyone can see must be most unsuitable for an infant's stomach. By the addition, however, of barley-water instead of plain water to the cow's milk, the clot can be rendered flaky, when it is easily acted on and digested by the gastric juice. Some doctors recommend that a pinch of isinglass or a square inch of leaf-gelatine be put in a cup of cold water, soaked for three hours, and then warmed till it is dissolved, and that a tea-spoonful of this be added to about half a gill of milk-and-water. The barley-water, however, will be found more generally useful and convenient. The following is Dr. Angel Money's recipe for making barley-water for an infant's bottle: "Two tea-

spoonfuls of pearl barley to a pint of cold water; boil it gently four hours down to two-thirds of a pint, strain through muslin, and use". The proportion during the first month should be two parts of barley-water to one part of cow's milk. If this food agrees, the quantity of milk may, after

five or six weeks, be very gradually increased, and the barley-water correspondingly reduced. It is not possible to lay down any hard and fast rule, as digestions differ; the child must be carefully watched, and the increase cautiously begun and continued as it is seen to agree. At six months old a healthy child should be able to take two parts of milk to one of barley-water.

The addition of barley-water reduces the quantity of fat, and brings it down below the quan-



Fig. 546.—Framework of Baby's Basket.

tity found in mother's milk. The right proportion can be restored by adding to each bottle of food a small teaspoonful of cream. The best way to obtain cream is to set a saucer of milk and skim it. Cream bought in jars is preserved chemically, and is quite different from freshly-skimmed cream.

One of the important points in respect of which breast-feeding is superior to bottle-feeding is, that when the child is fed at the mother's breast the milk is never in the least degree acid, and is always at exactly the right temperature; in the case of bottle-feeding it is often very far otherwise. Cow's milk, especially stable cow's milk, after standing a few hours is always to some extent acid, even when the acidity is not perceptible to the taste. A simple test will prove whether the milk is acid or

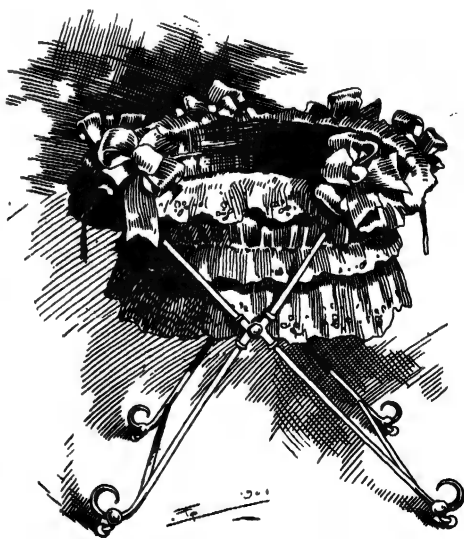


Fig. 547 --Baby's Basket, trimmed.

not. Buy a few pennyworth of blue litmus-paper from a chemist, keep it in a glass-stoppered jar, and when wanted, take a small strip, put a few drops of milk on it, and after half a minute wash the milk off with water. If the milk is acid, a red stain will remain on the paper. The addition of a table-spoonful of lime-water to each bottle of milk will neutralize the acidity of the cow's milk, which, even when quite fresh, is never as absolutely neutral as mother's milk. To prevent over-dilution of the milk, a table-spoonful of barley-water should be deducted from the quantity usually added to the bottle, the lime-water taking its place. The only reason why lime-water should be given to babies is in order to neutralize the acid of the milk. There is no use in giving it with the object of preventing rickets by supplying hard matter to the bones; for, in the first place, rickets, as far as it is due to feeding, comes more from want of fat than from want of lime; and secondly, there is enough lime in good milk to supply the mineral salts needed by the growing bones. An eminent physiological chemist, Professor Bunge of Basle, says: "Saturated lime-water contains less lime than cow's milk. In one litre of cow's milk I found 1·7 grammes of lime; in one litre of lime-water, 1·3 of lime. Next to milk the yolk of eggs has, of all food-stuffs, the most lime." It is obvious, therefore, that lime-water is only needed for the neutralization of the acidity of the cow's milk.

There is no need to buy the lime-water at the chemist's, as it can be made quite easily at home. Get an ounce of slaked lime from a building-yard, place it in a large bottle with a glass stopper, and pour over it two quarts of either distilled or cold boiled water. Let it stand—shaking occasionally—for twenty-four hours. It is then ready for use. Pour off as needed, without stirring up the sediment.

Two other additions to the cow's milk are needed in preparing the infant's bottle, namely, sugar and salt. Cow's milk is naturally less sweet (see the table) than mother's milk, and diluting it makes it even less so. Enough sugar should therefore be added to make it taste pleasantly sweet. Dilution also reduces the salts; the addition, therefore, of a tiny pinch of salt to each bottle, so as to equalize the proportion of mineral salts, assists the infant's digestion.

All good medical authorities agree that no harm at all is done by giving an infant milk from several cows so long as they are healthy, but that, on the contrary, there is this advantage in so doing, that if the milk of one cow happens to deteriorate it will do less harm mixed with that of the others than if taken alone.

Condensed Milk.—Condensed milk, if one of the best brands of unskimmed milk is used, is sometimes very useful during hot weather when milk so soon turns sour, but babies should never be entirely fed on it for several months together, as they seldom grow really strong on such food, though they may become fat and puffy. "A child brought up for seven months on condensed milk", says Dr. Angel Money, "runs the risk of becoming scorbutic or rickety, or both." When used, condensed milk must

be well diluted. During the first fortnight half a tea-spoonful of the milk to three table-spoonfuls of boiling water is the right proportion; ten drops of cream will be a valuable addition. Gradually the quantity may be increased up to one tea-spoonful of the milk and five table-spoonfuls of water.

Rules and Precautions.—Babies should be fed regularly every two hours during the day; less often, unless very weak and delicate, at night. If from the first regular hours are observed, the mother will save herself much trouble, and the child will be saved from indigestion. Milk in the stomach becomes to a certain extent solid; an interval for digestion is therefore as necessary after a meal of milk as after a meal of anything else. When practised in them from the first, a baby gets into regular habits with surprising ease, and if managed by a sensible mother will wake up every two hours, feed, and go to sleep with as much precision as a clock-work machine.

A big and vigorous baby will take, as a rule, about twelve ounces of food in the twenty-four hours, during the first week. The puny baby, however, requires to be well nourished; therefore it will be well to add a tea-spoonful of cream to four of its bottles during the twenty-four hours. To procure this cream, set aside in a large saucer some of the milk morning and afternoon, directly it is delivered, and skim off the cream when it is required. The milk so impoverished is not to be used for baby's bottle.

The Feeding-bottle.—There is a strong prejudice among people who think a great deal of saving themselves trouble, in favour of feeding-bottles with long india-rubber tubes. A very high medical authority, Dr. Lauder Brunton, speaks thus of the bottle with long tubes:—

“One of the most fruitful sources of diarrhœa in children

is certainly the use of feeding-bottles with long tubes, which are generally imperfectly cleaned, so that even when the milk is put quite fresh into the bottle it becomes inoculated with bacteria before it reaches the child's stomach. The difference between the chances of a child fed at the breast and in this way is enormous.

The old-fashioned boat-shaped bottle (fig. 548) is much the best to use. It is slightly more troublesome, for one must hold the child while the bottle

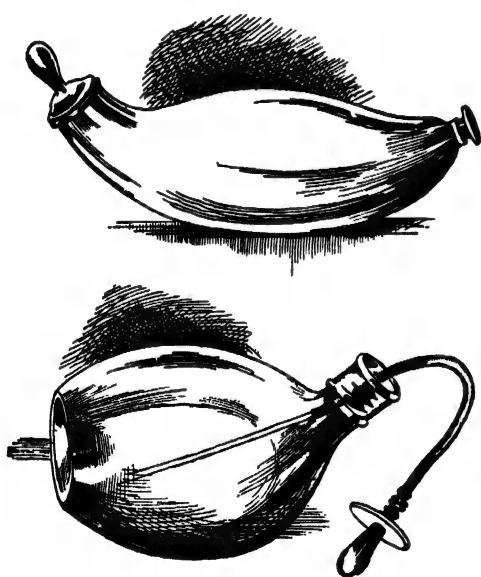


Fig. 548.—Feeding-bottles, with and without tubes.

is given it by hand, instead of, as is too often done, putting the teat at the end of the tube into its mouth, and, like Mrs. Gamp, leaving it to help itself when "so disposed". A case occurred lately of a baby which, left to help itself in this way in its cradle while its nurse was at her supper, wriggled on to its back, sucked in more milk than it could swallow, and was suffocated. It is very bad for babies to be allowed to drink too fast, just as bad as for older children to bolt their food without chewing. When the boat-shaped bottle is used, the flow of the milk can be regulated by the cork at the side. Care should be taken that the bottle teats are kept clean, and changed for fresh ones every month or so.

Bottle-feeding cannot be successful unless cleanliness is strictly observed with regard to every item. There should be two, or better still, three feeding-bottles, and when not in use they should stand in a deep dish of water, in which bi-carbonate of soda, a tea-spoonful to the pint, is dissolved. The bottles should be well washed with hot water and borax or soda after each nursing, and any milk left in them should be thrown away, not kept for another meal. The bottle with its teat and cork should be put into a dish of water as directed above. The jugs in which the milk is kept should be wide-mouthed, so as to be easily cleaned. The milk should not be kept in the nursery, but either in a refrigerator on the landing or in the coolest place possible.

Other Infant Foods.—There are certain foods which may be substituted for cow's milk and barley-water where this does not agree. The following recipe for artificial human milk is, by kind permission of Dr. Playfair, given from the last edition of *The Science and Practice of Midwifery*, Vol. II., p. 316:—

"Heat half a pint of skimmed milk to about 96°, that is, just warm, and well stir into the warmed milk a measure full of Walden's Extract of Rennet" (to be obtained of R. W. Walden, chemist, 65 Elizabeth Street, Eaton Square, London). "When it is set, break up the curd quite small, and let it stand for ten or fifteen minutes, when the curd will sink; then place the whey in a sauce-pan and boil quickly. In a third of a pint of this whey dissolve a heaped-up tea-spoonful of sugar of milk. When quite cold, add two-thirds of a pint of new milk and two tea-spoonfuls of cream, well stirring the whole together. If during the first month the milk is too rich, use rather more than a third of a pint of whey."

Sugar of milk is the actual sugar contained in milk, and by a peculiar process extracted from it and dried. It can be bought at a chemist's. Some doctors think cane-sugar preferable, and say it does not cause acidity so easily.

This preparation should be made fresh morning and evening, and is much cheaper if made at home than bought at a dairy or chemist's, and not only cheaper, but better and safer for the child. Dr. Cheadle says: "Artificial human milk will not keep long; after a time the cream separates, with some curd in great clots. If the dairy where it is manufactured is not within reasonable distance, have it made freshly at home. I have twice

seen children dangerously ill from taking artificial human milk which had been sent a long distance, and had changed in this way."

Digestible whey food is more simply made than the above, and is not so rich; very delicate babies often thrive better on it. Boil a pint of new milk, and when cooled to blood-heat add a full tea-spoonful of rennet; let it set and beat it up; strain off the whey through muslin, and add to it one-third of its quantity of milk, or milk enriched with a dessert-spoonful of cream.

Some very delicate infants cannot digest any kind of milk at all. In such cases whey from a pint of milk made as above, to which the well-whisked yolk of a raw egg or a dessert-spoonful of cream is added, will be digested, and will nourish the child until it becomes strong enough to digest milk.

Very remarkable results have followed the use of peptonized milk in cases where babies could not digest milk, and continually threw it up in the form of curds. Peptonizing means pre-digesting. Milk can actually be digested in a jug before it is swallowed, and can then be as easily assimilated as if digested in the stomach by the natural process. Any chemist can supply peptonizing powders with full directions.

In cases of very feeble digestion and great delicacy, infants have been successfully fed upon raw beef juice and meat (chicken, mutton, or veal), tea instead of milk. Such cases require medical supervision.

Weaning.—Weaning should always be done very gradually by substituting a bottle for the breast at intervals; if the child is nine or ten months old a spoon can be used instead of the bottle. If it has three or four teeth, thin well-boiled oatmeal gruel made with milk and groats or fine oatmeal can be given, or some reliable infants' food made with milk; but none of these things should be used as a substitute for milk, or the child will very probably become rickety. Nothing can take the place of milk as a food for babies; the more of it they have until they are three years old, the stronger they are likely to become.

Physical Development.—The weight at birth, usually six or seven pounds, should be doubled in six months, and trebled by the end of the first year; the weight at two years of age should be doubled at seven, and this should be doubled at fourteen. The average length at birth is 19 inches; it should be doubled by the end of the fourth year. Weight and growth should increase together.

The bones at the top of the skull should not close up till the end of the second year. The spine of the infant is very weak, and therefore to make it sit up straight before it does so of its own accord is very harmful to it. Mail-carts are consequently extremely unfit for infants, who should always be taken out in perambulators.

The mother who carefully studies the clothing, feeding, and management of her children, and gives them unremitting care in their early years, will be spared much anxiety in nursing illnesses, and will have the happiness of seeing them grow up to a healthy and well-developed maturity.

Perambulators and Mail-Carts.—Mail-carts which have a straight-



Fig. 549.—“Princess Patricia” Baby-Carriage
(By Hitchings, Ltd., London)

backed seat and a foot-board are only suitable for children from three or four years old, and even for them the lack of a hood for shelter against rain, wind, or sun is a disadvantage. For young babies such a vehicle is not only unsuitable but injurious. This ought to be apparent to everyone, but it is not so, evidently, for one frequently sees little infants of a few months old strapped into a sitting position in mail-carts of this kind, and being jolted along quite regardless of the jarring to the spine that must result from such a mode of con-

veyance. The brain of a new-born baby is about 14 per cent of its body weight, that of a grown person but 2·37. A young baby's head is therefore out of proportion heavier than its body, and its spinal column, being very weak, is unable to support the head in an erect position. To keep an infant for any considerable length of time, as during an hour's ride, for instance, in this position, until its spine is strong enough to enable it to sit up straight of its own accord, is to subject one of the most vital parts of its body to a strain that may do serious mischief. It is for this reason chiefly that a “Bassinette” perambulator is the only kind of baby-carriage suitable for an infant during the first year. It is always fitted with a reversible hood. Such a carriage, if provided with a hot-water jar



Fig. 550.—“Princess Louise” Mail-Cart with movable well forming a bed for reclining. (By Hitchings, Ltd., London)

and with plenty of wraps, is a better resting-place for a baby during its airing than a nurse's arms, because in it its limbs have free play to a much greater extent than when held in the arms. It is said that since bassinette perambulators became general, deformities among children, such as occur from their being let fall, are much less frequent.

In the mail-carts above-mentioned a hot-water jar cannot of course be placed, hence another reason why they are unsuitable for very young children, who, without the help of some artificial heat, are easily chilled in winter. Many an attack of bronchitis, diarrhoea, &c., is brought on from sitting chilled in the perambulator, while the nurse, like the one in Leech's picture, is engaged "window-shopping", leaving her charge to the full benefit of the "delicious north-easter".

To protect baby's eyes from the sun or glare shining full on them is of the first importance both for comfort and the well-being of those most delicate organs. A summer awning for any perambulator is very easily made of holland or linen, white, ecru, pale-green, or blue. This can be scalloped round the edge and bound with washing braid. In the perambulator the child, when sitting up, should have its feet comfortably arranged, on a small stool if necessary, so that they shall be supported and never dangle, thus avoiding any strain upon the spine.

BABY AILMENTS.

Breast, Inflammation of.—Breast inflammation in infants is sometimes the result of rubbing and squeezing by ignorant nurses. Apply a warm bread-and-water poultice, or linseed poultice, or soft pad wrung out of warm water and covered with flannel. The inflammation will soon subside with the above soothing treatment.

Bronchitis.—When young babies get bronchitis it is owing to carelessness in keeping them out late at night, or exposing them to fog, east wind, or draughts while washing. The complaint is extremely dangerous when it attacks infants. If all children from birth wore woollen under-clothing with high necks, long sleeves, and long stockings, and had double-breasted flannel night-gowns or sleeping suits, the present very high death-rate among children from chest complaints would be lowered considerably. Poulticing with linseed, not linseed meal, but crushed linseed, is the best treatment for bronchitis, as the blood is thus drawn to the skin away from the inflamed bronchial tubes. The poultice must be applied as hot as the child can bear it, and renewed in two or three hours. If its surface is smeared with oil or vaseline, the heat will be better borne. When the final poultice is removed, the skin must be wiped dry and covered with heated flannel. In less severe cases an artificial poultice is most useful. Get a small packet of medicated cotton wool at the chemist's, hold it before the fire till it puffs out, and apply it very hot over the back and chest; then cover with oil silk, and bandage on with

broad strips of flannel. This may remain on for several days without changing; the wool can then be gradually picked away bit by bit. Five drops of ipecacuanha wine in a tea-spoonful of water once or twice a day loosens the phlegm.

Chafing.—This is caused by neglect, or by washing the napkins with soda, or by the slovenly practice of merely re-drying them after wetting. Baby diapers should never be washed with soda; they should soak in cold water for an hour at least after being wet. In frosty weather little children want great care in drying to prevent chafing. Wash the part occasionally with barley-water, dab with a soft diaper, and grease well with vaseline or boracic acid ointment. The part between the legs should be slightly smeared with vaseline after each washing; this is a better preventive of chafing than powdering.

Child Crowing.—This is a convulsive spasm of the windpipe to which some babies, especially those left in stuffy, ill-ventilated rooms, are liable. Preventive treatment consists in keeping the child as much as possible in the open air, no matter how cold the weather. The cold air acts as a tonic and prevents the spasms. When an attack comes on, the windpipe closes, the child fights for air, and in the gasping for breath "crows"; the face turns blue, and without instant treatment the child may suffocate. In cases of an attack, dash cold water in the face; hold a bottle of smelling-salts to the nose, and put the finger to the back of the throat and pull the tongue forward. "This plan", says Dr. Chavasse, "opens the windpipe, and thus air is admitted into the lungs, and impending suffocation averted. If this plan were generally known and adopted, many precious lives might be saved." A sponge should be wrung out of hot water and put to the throat.

Colic.—This is caused by indigestible food. The child screams violently and draws up its legs. Give a dose of castor-oil, apply a hot flannel or linseed poultice to the belly, and rub it gently with a warm hand. A tea-spoonful of dill-water gives relief.

Constipation.—Constipation generally arises from indigestion, or is hereditary, and, if neglected, is likely to become a habit. A simple aperient given occasionally may be beneficial, but, to get the child to form a habit is one of the first duties of the nurse. An infant should be held out regularly almost from its birth, and if a little forcing sound is made at such times, the little one will soon learn to understand, and in an incredibly short time to imitate the sound, thus making known the desire to be held out. Later on, when able to sit up, the child, if placed regularly in a chair provided for the purpose, will, as a rule, become quite regular in its habits. One of the most useful aids in cases of infantile constipation is gentle massage of the body, below the breast-bone and between the hips, moving the hand gently from the right side to the left.

Convulsions.—In a case of convulsions put the baby as quickly as possible up to the neck in a hot bath. The water should be as hot as

the mother's elbow can bear comfortably. This draws the blood from the brain and restores consciousness. Dash cold water from a sponge on the head. When the child can swallow, give a dessert-spoonful of castor-oil.

Croup.—This seldom occurs after the fifth year, and is most common during the second and third years. It must be treated promptly or the child may suffocate. Give a full tea-spoonful of ipecacuanha wine, and repeat the dose every ten minutes till the child vomits freely. Put the child into a hot bath, and while this is being got ready, apply a sponge wrung out of hot water to the throat. If suffocation appears imminent, put the finger down the child's throat and make it vomit. Have a big kettle boiling on the fire, or a wet blanket hanging before it, or plunge a red-hot brick in a pail of water to make the air steamy. All this must be done while the doctor is being fetched. In a bad case he must be sent for quickly, since it is sometimes necessary to perform tracheotomy (opening the windpipe) to save the child's life.

Ipecacuanha wine is useless if not clear. Keep it sealed. If it turns cloudy, throw it away. It should always be kept, and also the means of getting hot water quickly, where there are young children in the house.

Diarrhœa.—This comes either from cold and exposure or from wrong feeding. Keep the body warm, and give a dose of castor-oil, which generally has a surprisingly good effect in curing diarrhœa in infants, because it clears away whatever is irritating the intestines. Give less barley-water and more lime-water while diarrhœa lasts. This complaint is very dangerous if neglected in young babies. If it does not soon yield under the above treatment a doctor should be sent for.

Eyes, Inflammation of.—Never neglect this in infants; it may lead to total blindness. Always consult a doctor at once if the baby's eyelids swell, or if any discharge comes from them.

Flatulence.—Dr. Eustace Smith recommends two tea-spoonfuls of cinnamon-water for this complaint. He says: "I have known infants who were invariably troubled with flatulence after a meal of plain cow's milk and barley-water digest perfectly the same mixture when thus aromatized".

Head Swellings.—After birth infants' heads are often swollen, and even distorted perhaps for weeks. Leave them alone, they will come right gradually.

Navel, Oozing from.—Buy a pennyworth of permanganate of potash; put a small pinch in a tea-cup of water, bathe the part with this several times a day, dry, and dust with oxide-of-zinc powder.

Teething.—The first tooth generally appears between the sixth and seventh month, but may come earlier or later. Very late teething usually occurs in rickety children. The first teeth cut are nearly always the two lower front teeth: in about six weeks come the upper ones to match; then at intervals of a few weeks the teeth next the front teeth, followed by the molars, the eye teeth, and lastly the back molars. The whole set in a

healthy child is cut at latest by the beginning of the third year. The first set of teeth consists of twenty, ten in the upper and ten in the lower jaw. The second set are thirty-two in number, and begin to be cut in the sixth or seventh year.

During teething four things are absolutely essential—to keep the belly and legs warm, and avoid chills; to see that the child lives in well-ventilated rooms, and is in the open air as much as possible in fine weather; to take special care of the diet; to be very particular that neither constipation nor diarrhoea is neglected. The bowels should act once or twice a day at least, as any approach to constipation at this time is very injurious. No change of diet should be made when a tooth is just coming through. The child should have an india-rubber ring or pad to bite; this is much better than bone.

Never give babies crusts or chicken-bones “to teeth on”; it is a dangerous practice. If the gum is swollen and inflamed, rub it with fresh lemon juice; crying is thus increased for a minute or two, but great relief follows. Lancing is useful if the skin over a back tooth is hard and tense.

Castor-oil is very useful if the child is restless and feverish.

Thrush.—The symptoms of thrush are white spots like bits of white curd sticking on the gums, tongue, and inside of cheek and lips. They are evidence of indigestion and errors of diet. Give a gray powder (the chemist will supply the right amount if told the baby's age), and rub some glycerine and borax (a tea-spoonful of borax mixed in a table-spoonful of glycerine) several times a day on the affected part. When the child has had the breast or bottle, the mouth should be gently washed out with a bit of clean rag dipped in a weak solution of boracic acid and water.

Supplementary Suggestions.—A strong healthy child may be reared on Robinson's patent barley and groats, the latter rich in mineral (that is “flesh-” and “bone-forming” matter), if carefully prepared according to the instructions. It is about the cheapest child's food to be had, and is pure. therefore very much more to be relied on than many of the cheap patent foods in the market, which often make children very fat, while the blood, bones, and muscles are badly nourished and developed.

Other foods to be recommended are: Savory & Moore's, Allenbury No. 1, Allenbury No. 2, Horlick's malted milk, Frame food, Benger's food, which also partly digests the milk during preparation, and is therefore often useful for delicate infants. Any of these foods may be given to very young infants in exceptional cases, and only by a doctor's order, and then only as a temporary and occasional measure, always bearing in mind that such food is not an equivalent for fresh milk. There is far more danger in over-feeding children than in under-feeding them.

A few drops of pure, fresh, cold water will frequently refresh and soothe a restless wakeful baby when all other efforts fail. The mistake is in not trying the water cure in the first instance; a tea-spoonful or two will often work wonders, and no nurse or mother should fail to have this remedy always at hand in a cool place.

MANAGEMENT OF CHILDREN.

MEALS.

During Second Year.—The most difficult period of life as regards diet is the first year, and after a perusal of the previous section, readers will be prepared to go on to discuss the question of the more varied diet which is suitable for children after that age. During the second year of life the diet should consist mainly of milk, and such a dietary as the following may be recommended:—

First meal, at 7 A.M. Eight ounces of milk taken with some infants' food, groats or barley jelly being good and tending rather to relax the bowels, while flour ball or ordinary white bread and milk may be taken instead of this if the child has at all a tendency to be relaxed.

Second meal, at 10 A.M. Tea-cupful of milk, bread-and-butter, the yolk of an egg lightly boiled, with bread crumbs, a little white fish, bread dipped in bacon fat or dripping toast. These form an agreeable variety. After eighteen months a little oatmeal-porridge or hominy mixed with milk may be given three times a week, and it is a good plan if the children are at all troubled with indigestion or acidity, instead of sweetening the food with sugar, to use a tea-spoonful of malt extract, which partially digests the starch of the food and renders easier its assimilation, while at the same time affording nourishment. Malt extract may also be added to ordinary milk or bread-and-milk, or spread like treacle on bread-and-butter, and if a child is thin and subject to bronchitis or any weakness of the chest during the winter, it is often well to give, three times a day after meals, a tea-spoonful of malt extract prepared with cod-liver oil. The ordinary method of administering cod-liver oil is quite wrong, the doses being too large to be properly assimilated. Not more than a tea-spoonful should be given at a time.

Third meal, or dinner, at 2 P.M. Beef-tea or broth (made from mutton, chicken, or veal) with bread broken in it; or potato mashed with egg and butter, or moistened with beef-tea; or, when fish is not given in the morning, white fish picked over with the fingers to see that there are no bones in it, with bread-and-butter or potato-and-butter. Milk should be given to drink. This may be followed by a large table-spoonful of custard pudding, ground-rice pudding, or some other light pudding.

In giving young children their dinner it should always be served on a

hot-water plate, as children eat so slowly that the meal is apt to become cold and distasteful long before they are finished.

Fourth meal, at 6 P.M. Bread-and-milk, or a little weak cocoa made with water with the addition of one-third milk; bread-and-butter with a little marmalade or plain jam without seeds, or a baked apple.

From Second to Fifth Year.—From two to five years the above dietary may be supplemented by giving for dinner one of the following dishes. Breast of chicken, a larger amount of fish, the well-cooked eye of a chop, a little piece of well-cooked steak, roast meat, boiled meat, a little game if not high; also a more liberal supply of vegetables. Children of this age may have banana, cooked apple, soft pears, grapes, stone fruit if well stewed and the skins and stones removed, and occasionally a few strawberries, but no figs or other fruits with seeds, as the small seeds are apt to irritate the bowels and very often set up severe internal trouble.

Some children show a marked craving for animal food; this may be looked upon as a natural instinct which it is wise to satisfy. In warm weather it is best to give less meat, porridge, or heating foods, but more vegetables and fruit. In the winter, soup should certainly be given for the mid-day meal as a regular thing, and twice a week the little people might with advantage dine off soup and a nice, light, well-boiled suet pudding, one of the most nourishing foods there can possibly be for children, and older folk too. The great matter is to have it well boiled and light. One day it can be served with good gravy; sometimes currants could be boiled in it, or it may take the form of a jam roly-poly. Then, again, plain golden syrup or jam will be a nice accompaniment to it. If the changes are rung in this way the children will not tire of their suet puddings. In winter, stewed prunes should be served sweet once a week, with plain boiled or baked rice, tapioca, semolina, or something of the kind. Once a month a few, very few, senna leaves—not pods—may be boiled with the prunes, as this will render them still more laxative. For all young children ham, pork, liver, corned beef, and salt fish should be avoided, as they are very indigestible and particularly bad for the skin, pickles, spices, and highly-seasoned food, made dishes, pastry, new bread, and hot cakes. Cool filtered water should be given freely to young children, except when they are hot.

Beyond the Fifth Year.—For children above the age of five, especially those who go to school, it is generally necessary to arrange meals to suit lesson hours. Breakfast may then be at 8. If it can be arranged, the children should have a glass of milk and a slice of bread-and-butter at 11, and their dinner at 1 or 1.30.

Parents should be most careful to see that the school diet is sufficiently varied. It must be plain and nourishing, but the result of having the same kind of meals every day is very likely to be loss of appetite and diminished nutrition. The following is suggested as a useful school dietary:—

The first thing on rising (if lessons are commenced before breakfast), a cupful of warm milk and a hunch of bread. Breakfast: oatmeal-porridge

or hominy, or some other cereal preparation made into porridge, with cream and sugar or malt extract, followed by fish or eggs with cocoa or very weak coffee-and-milk to drink. Dinner: soup (pea-soup is cheap and nourishing), hot meat, milk puddings or suet puddings with treacle, only very occasionally pastry. Tea: bread-and-butter with honey, jam, or marmalade, baked apples, or home-made cake, with cocoa to drink. Supper should consist of a large cupful of bread-and-milk.

LESSONS.

Lesson Hours.—This is the day of over-education, and parents cannot be cautioned too strongly against allowing their children to be overworked from an early age. If with young children the kindergarten system is adopted, as is recommended in a later section of this book, it may be begun at the age of two or three years; but until a child is five years old, formal lessons sitting to a table should not occupy more than two hours daily, and the child should be allowed to run about and do the little kindergarten songs and exercises in between the lessons which have to be given sitting down. Lessons should not interfere with outdoor exercise, and the lesson hours should be suited to the various seasons. In summer, for example, it is a good plan to allow a child to go out-of-doors immediately after breakfast until about eleven o'clock, then have an hour's lessons if a governess is kept in the house, and then sleep till dinner. In the afternoon it may have lessons from 3 till 4. As the child grows older the morning sleep will be given up, and the lessons may begin at 11 and last till within half an hour of dinner-time, and from 2 till 4.30 in the afternoon. After tea the child should go out until the time for supper and bed.

In winter the arrangement must be different. An hour's lessons may be given in the morning from 9.30 to 10.30, and the child should then go out till dinner-time, the chief lessons being given in the afternoon, since the winter evenings draw in so early that it is not advisable to allow young children to go out after 3.

When children go to school, it is of course necessary to conform to the rules of the school; but very often, when the school is a small one, and the parents of the children know one another, the mistress may be induced to rearrange her lesson hours on perhaps a more desirable plan than that generally followed at present. At most kindergartens, however, lessons go on from 9.30 till 12, and in the afternoon for older children from 2 till 3.

Overwork.—As far as possible children should never be allowed to work by artificial light, and it is most important during very early years that they should not do any work which necessitates close application of the eyes. This is one of the commonest causes of short-sight and other eye complaints. When children appear to be over-fatigued and get pale over their lessons, and more especially if they are restless at night and

talk of their lessons in their sleep, it is absolutely necessary that a change should be made, so that they may have more rest.

When a child shows irritability of temper, jerking and twitching movements, and over-anxiety about work, it is time that the parents should thoroughly enquire into the amount of work done and the method employed. Serious nervous break-down or St. Vitus's dance is likely to result if the warning contained in these symptoms passes unheeded.

EXERCISE.

Outdoor Exercise.—Outdoor exercise for infants has been treated in a previous section, and in reference to the question of lessons the necessity has been emphasized of taking children out-of-doors regularly when the weather permits. To attempt, however, to harden children by taking them out in all weathers is usually a mistake; they will have better health if kept indoors during fogs, severe winds, mists, and rainy weather. It may be taken as a general rule that whenever the weather is fine, children should be in the open air as many hours as possible, but when very young they should be brought in if they appear to be chilled; very often they seem to become quite numbed with cold even on a fairly bright day, not being able to continue for a long period sufficiently active to keep up the temperature of the blood.

Indoor Exercise.—After a child has been allowed to roll about and crawl for some time it will naturally, if it is healthy, learn to walk and run; but children should never be taught to walk, as deformities of the legs are likely to result. When the system is sufficiently developed, they will naturally and of themselves learn to walk by imitating their elders. Once a child can walk, as a rule if healthy it gets sufficient exercise by its constant restless movements. Its lungs are exercised by the efforts in making a noise, and its muscles and bones strengthened by the running about and gesticulation. At the same time it is essential for every child to learn the art of sitting still without fidgeting. A kind mother or nurse will gradually train a child to do this, keeping it amused part of the time, which should never be long, in telling it some interesting story or rhyme, and as it gets older reading to it. In after-life the child so trained is always thankful for it, and is usually a favourite with grandparents and others.

Forms of Exercise.—When physical exercises are planned, they should be arranged so as to keep in view the harmony of development; to cause greater power in breathing, and to distribute muscular and nerve force equally, so as to give rise to a healthy functional condition. The little exercises taught in the kindergarten are often admirable, but unless the teacher is careful they may be useless; as for example when a child does the arm exercises in a stooping posture, with chest contracted. Children are sometimes put through their exercises in this most unhealthy position.

Gymnastics on the Swedish system are decidedly preferable to others, but ordinary gymnastics should be practised only under medical supervision, since violent exercises on mechanisms such as trapeze or the vaulting-horse, and leaping, and rope-climbing cause frequent injury. Too much cannot be said against the "giant stride" so popular in girls' gymnasiums. It is very likely to cause permanent internal trouble, or even internal dislocation.

Swimming is a good exercise for young children, and should be taught from the age of four or five years, but care must be taken not to frighten the child by forcing it into the water if unwilling.

Cycling, which is now popular even for very young children, cannot be deemed at all a good exercise until about the age of nine, but for younger children the tricycle is decidedly more suitable than the bicycle. In choosing a saddle it is necessary to be careful that the body is supported upon the back part, and that no pressure comes upon the front part. The pedals must be in such a position that the legs are not unduly strained.

DISCIPLINE AND EARLY TRAINING.

Management.—If it is often difficult to meet satisfactorily the physical needs of children, when we come to the moral needs the difficulty increases very much. In this respect the most important thing is to form and guide the habits from the very earliest age. The idea expressed in such remarks as "Baby is too little; he will do better by and by", or "What can be expected from so young a child?" is responsible for much of that neglect in early education which leads to the most disastrous consequences in after-life. For example, if a habit of attention is not acquired early in life, it is with difficulty acquired afterwards, and the individual may always suffer from the mind's wandering and consequent inability to concentrate the attention on the work in hand. A little child naturally pays much attention to the things about it, and even from the age of six months the baby may be seen examining his bottle or his ball. The natural tendency is, however, ignorantly interfered with by parents or nurses, who try to hurry on a child from one thing to another.

There is very much wisdom in leaving little children judiciously alone to examine and take in the objects around them, and to ask their own questions as these occur to them, when we may answer to the best of our capacity. Children's questions are extremely important as affording a means of training them, and form one of our greatest difficulties. Roughly speaking, questions may be divided into three classes. First, those asked in a natural spirit of enquiry, which we should encourage and develop, as it is the basis of all knowledge and of scientific acquirements later on. Secondly, those asked out of curiosity, or dealing with personalities and subjects into which it is better for a child not to enquire; these must be

put a stop to. Thirdly, those asked merely for the sake of attracting attention, which should also be checked, as it is a mistake to allow children to get into a habit of interrupting their elders when they are engaged in any important work. The first class of questions should always have our best attention, but if we do not know exactly how to answer, it is not right either to evade or to give a wrong answer. No child loses his respect for his mother or teacher if she replies "I cannot tell you now, but will find out and tell you to-morrow", always fixing a definite time by which she can be prepared with an answer. A sensible question from a child asked in this way very often leads to a lesson of great importance. In giving answers, however, the language chosen should be of the simplest, and suited to the child's intelligence. Questions when an order has been given should be checked as far as possible, as bordering on disobedience. For example, if a mother tells her son to put on his overcoat before going out, and he says "Why need I? I don't want to", it is sufficient that she thinks it best he should do so. Very many people consider that the reason for orders should always be given, but this is doubtful, as it is subversive of that obedience which is so desirable. It is said of the soldier, "Theirs not to reason why. theirs not to make reply", and children should obey orders in a similar unquestioning spirit.

The habit of obedience is one which modern methods of training tend to discourage, and this is a very serious matter indeed. In the time of our grandmothers to question the dictum of a parent would have been considered an outrage, but with growing and improving methods of training, and the greater amount of consideration that is now shown for the child, there is a tendency to be too weak in yielding to its desires. It is an error of judgment to yield to such a plaintive appeal as "Oh, do let me sit up a little longer", or to allow one's self to be persuaded into giving some article of food which has been at first refused, or permitting some act which in the ordinary course of things is forbidden. Every time that such a thing takes place, the mother or guardian is injuring her child by encouraging a habit of disobedience, and allowing it to see that it can get its own way if it perseveres long enough.

Temper in Children.—Outbursts of temper in young children form a great difficulty. Infants before they can speak very often fall into the most violent passions because they cannot make a certain want understood. When a child has a battle-royal with its mother or nurse, it is best to put him to bed and keep him there for a time; but those who have the care of children should always try if possible to understand the cause of the temper, which, when discovered, will frequently appear not to be unreasonable. When older children have violent fits of temper, it is impossible to reason with them at the moment, but afterwards they may be quietly talked to. For example, a good father once heard his child say, "I am a giant, a good giant; I have been fighting with a bad giant", and taking the hint, asked him if he would really like to grow into a good giant, and fight a very naughty giant. The child replied that he would, being

especially pleased when told that the other giant every time he was conquered grew smaller, and the good giant at the same time grew stronger. Afterwards, whenever he was getting angry, if the father or mother said that unless he took care the bad giant would conquer, the little fellow would make the strongest efforts to control himself. Whipping or corporal punishment very rarely has a good effect when a child is thoroughly enraged, as it rouses the spirit of combativeness still further. Very often bad temper is due entirely to disorder of the liver, and a small dose of gray powder will be productive of peace next day. In cases of obstinacy and bad temper kindly ridicule is often a useful weapon, and for the mother or nurse to show that she is personally hurt by such behaviour will, in kind-hearted children, often stop the trouble. Treatment to be successful must vary with differently-constituted individuals.

Punishment.—Corporal punishment is a matter which has been widely discussed of late years and generally condemned. Undoubtedly the system was very much abused in former days, and without the strictest care may still be abused, but the pendulum has swung too far in the opposite direction, and doubtless there are many misdemeanours for which a slap, or in school-boy life a caning, would be a proper method of treatment. A child under the age of four is rarely able to reason as to the motives of action, but sees that, if a certain fault is always followed by a slap, it is not wise to repeat the fault. Children can be trained from the first to know right and wrong, just as young animals are trained to cleanliness, obedience, and the like. Corporal punishment should never be applied after the age of six years to girls, although if boys are unruly, disobedient, or vicious, it may be administered to them after that age. Never punish a child for an accident, for to do so is an injustice, and the little ones are particularly sensitive on this point, as their sense of justice is very keen. A little child who in a rage wilfully pinched the kitten or twisted its tail would certainly be deserving of a slap, but if accidentally he broke a vase this would not be deserving of punishment, unless the article had been touched in disobedience to previous orders. As a rule, it is sufficient if a young child is naughty or disobedient for him to be placed in the corner, this being understood to be a great disgrace, or he may be put to bed or deprived of some favourite dish which the other children have at dinner or tea. Such punishment, however, must not be allowed to interfere with nutrition, and to make a child do without its tea or supper altogether is exceedingly wrong.

CHILDREN'S DRESS.

Children's clothing may be divided into—

1. Underclothing.
2. Indoor clothing.
3. Outdoor clothing.

All clothing is designed for the protection of the body from sudden changes of temperature, and should be light, warm, well-fitting, and pretty. Children, having a much larger surface of skin exposed in proportion to their bulk than adults, are more liable to take cold, and it is of the greatest importance that their clothing should be suitable. Wool absorbs perspiration, and gives it off again without causing a chill; every child, therefore, should have a complete set of woollen underclothing, thin for summer and thick for winter, whatever the upper garments may be. Cotton has the power of absorption, but remains wet much longer, and therefore chills the body more rapidly. It is generally recognized that a boy must wear woollen drawers and vests, yet they are not considered of the same importance for girls. A much larger proportion of girls die of consumption than boys, and this is often attributed by medical men to the greater exposure, in the case of girls, of arms, legs, and neck.

If flannel or woven garments are too expensive, vests and drawers may be knitted at home at much less cost. It is a good plan to cut a paper pattern of the garment, and knit to the desired size. Combinations are not so successful, except in small sizes, as they are pulled out of shape by the weight of the water in washing.

Failing wool wincey is a good substitute. Avoid flannelette, which, although it is cheap, and easy to wash, is only made of very inferior cotton, and is highly inflammable.

Stockings and socks should always be of wool, as children's feet often perspire much. Winter hosiery may always be hand-knitted; it costs less and wears better than bought goods.

For girls, dark serge knickerbockers with loose inner linings give the limbs more play than flannel skirts, and are neater, particularly for the modern girl who plays hockey, golf, and cricket. Small girls of two or three years of age do not look well in dark knickerbockers, and their overskirts are so short that they do not impede the free movement of the limbs as do the skirts of taller girls.

Children of both sexes should sleep in woollen garments.

Garters impede circulation, and should be replaced by suspenders of elastic attached to a waistband, or to buttons sewed on to a strong underbodice.

The boots and shoes of children should be made the shape of the feet (few persons have both feet the same size), the outline of the foot being taken with the child standing upright on a piece of paper. Shoes made to order are more expensive than those which are ready-made. If expense be an object, the ready-made shoes should have square toes, flat heels, be an easy fit, and if for "best" wear should be a size larger, to allow for growth during the longer time they will be in wear. Shoes and cloth gaiters for wet and cold weather are more strengthening to the ankles than boots, which give fictitious support, deprive the ankles of the necessity for work, and so make them weak. Patent leather is injurious, as it prevents the dispersion of perspiration from the feet, and tends to produce the cold feet from which so many children suffer.

School-children should be provided with mackintosh cloaks and coats, ventilated. The old waterproof garments were unhealthy, keeping in all the moisture from the body, but they are now made perfectly hygienic and can be obtained at small cost.

A mother should provide for her children comfortable and healthy clothing: both are quite compatible with elegance. Materials are cheap; making-up is dear. A good needlewoman, with the help of patterns, can with little training make clothing for the boys as long as they wear serge suits, and for the girls for an indefinite length of time, provided she does not attempt anything more elaborate than can be finished correctly. The sewing and material in home-made garments is far better than in those that are bought, and home dressmaking, home millinery, and even home tailoring in a small way will repay the careful mother many-fold.

Underclothing.—For under-garments there is a certain scale of length and breadth. The scale for children is different from that for adults:—

Chemise—length and width equal up till age of 8 years. After that age, length is 3 inches greater than width.

Drawers and knickerbockers, small sizes—width one and a half times the length; larger sizes—width one and a third times the length.

Combinations, as the name indicates, are the combined patterns of the top of the chemise attached to the knickers.

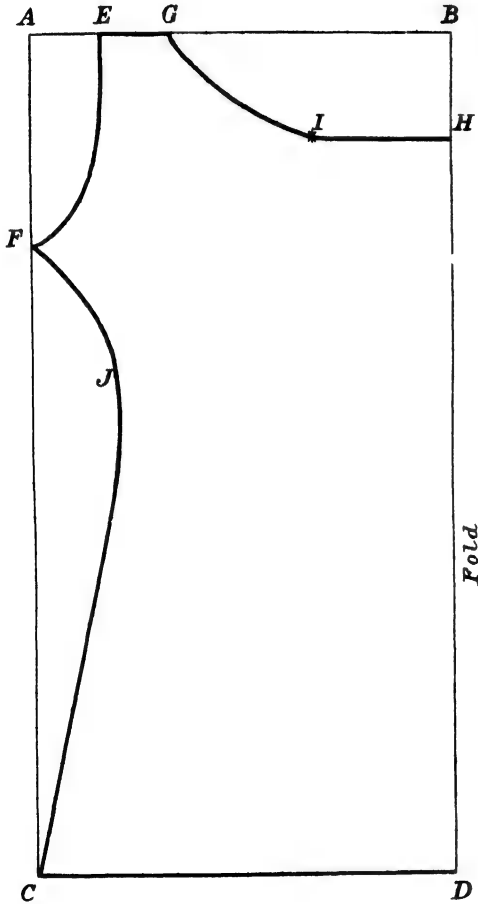
Chemise.—Take the length required from shoulder to knee, say 24 inches. Then the width equals the length (24 inches), and the sleeve takes one quarter of the length (6 inches). The chemise is sloped back and front the same, half the sleeve length (3 inches). The length of the shoulder varies from 2 to 3 inches according to taste.

Take a piece of paper 24 inches square and double it in two lengthwise, and mark the corners A, B, C, D, as in Plate A, fig. 1. From A measure 2 inches (E). From A measure down one quarter the length, mark

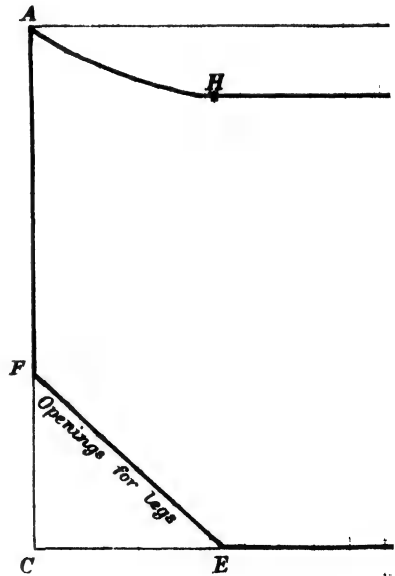
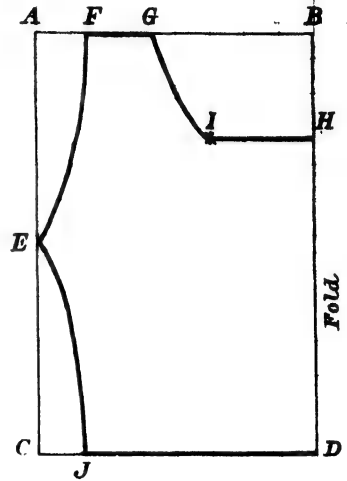
PATTERNS FOR CHILDREN'S DRESS

PLATE A

1. Chemise for a Child of 8



3. Bodice of Combination

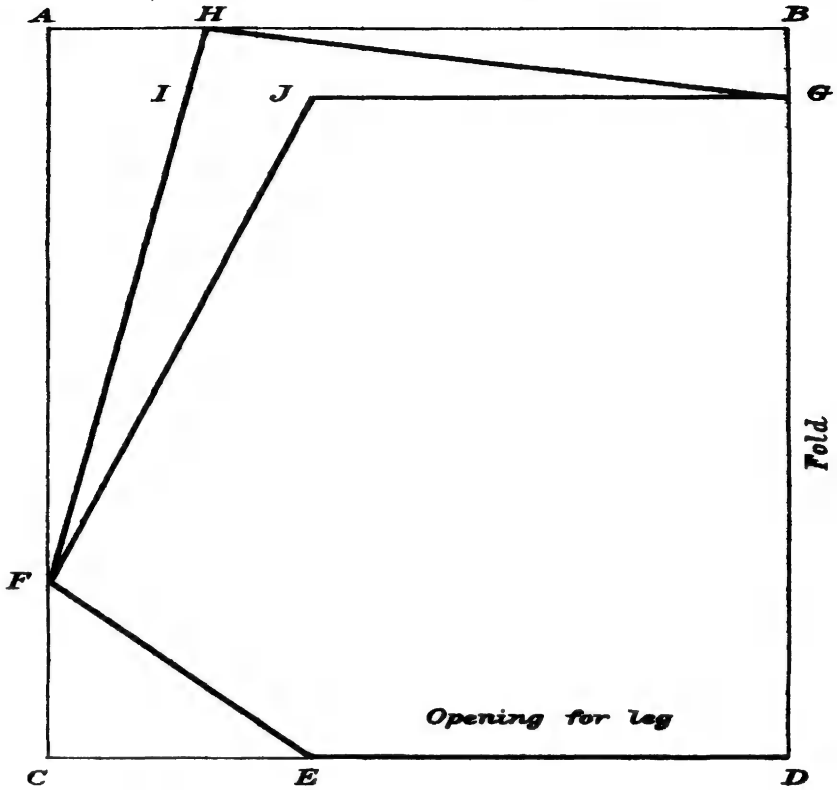


2 Child's Knickerbockers:
or Drawers

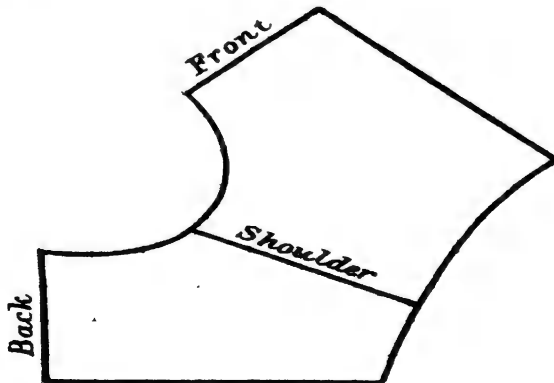
[Each square represents one inch]

PLATE B

1. Girl's Knickerbockers

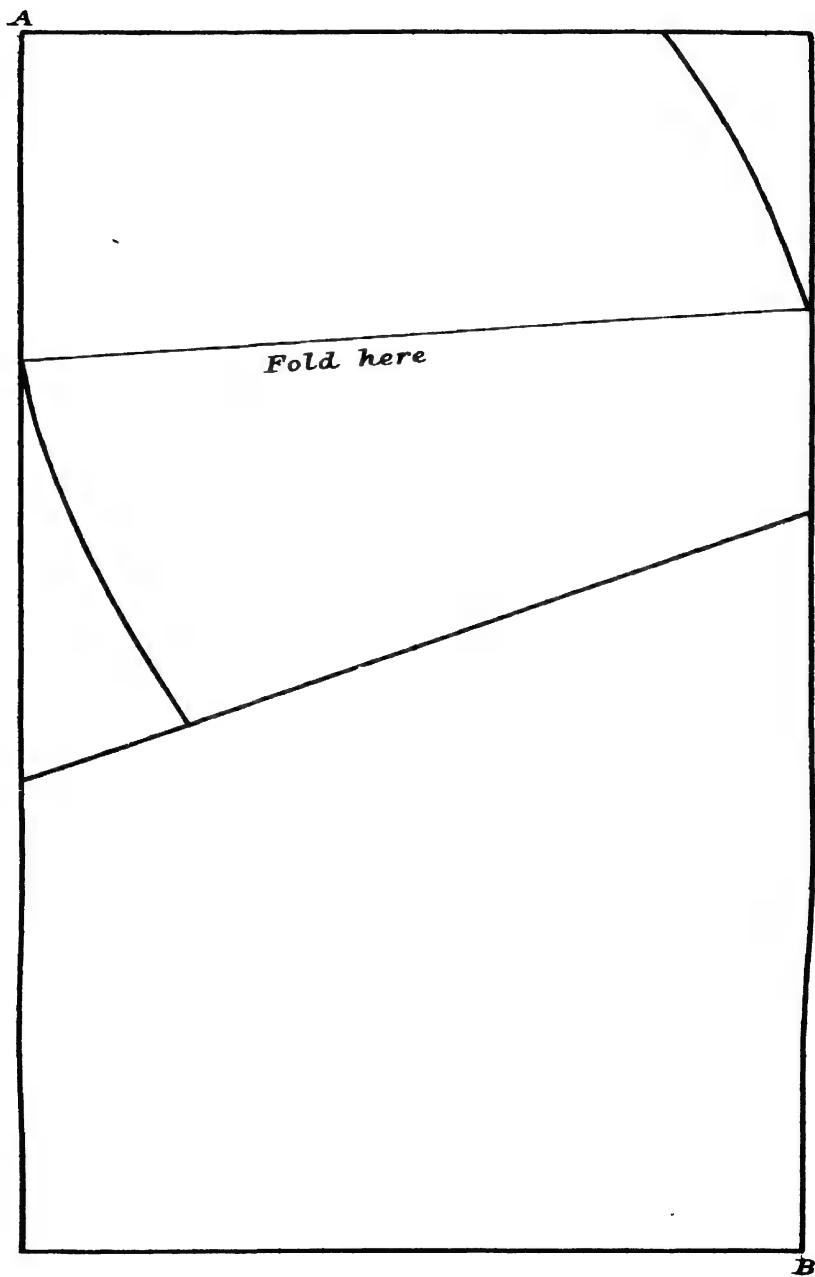


2. Night-Dress Yoke cut from Bodice Pattern



[Each square represents one inch]

PLATE C—NIGHT-DRESS SLEEVE

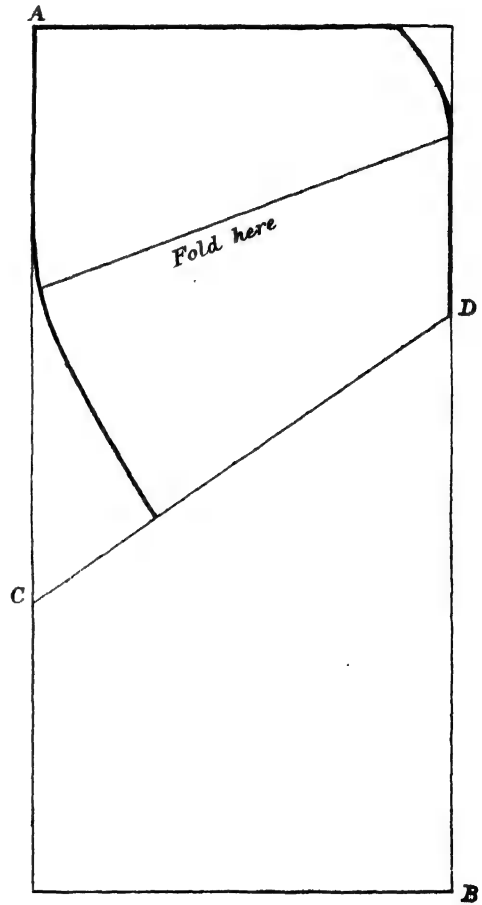
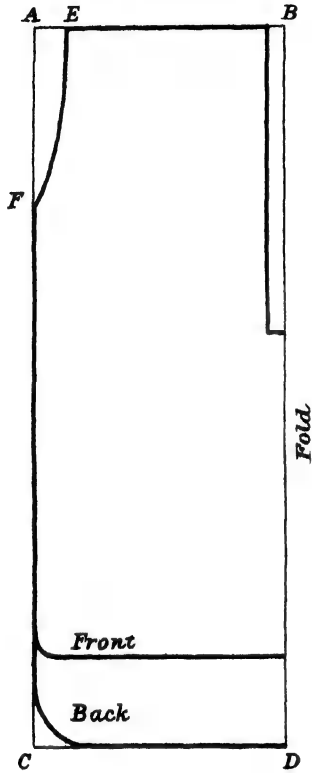


[Each square represents one inch]

PLATE D

2 Shirt Sleeve, showing how to fold and cut off corners

1. Boy's Flannel Shirt



To cut neck

[Each square represents one inch]

it F. Curve from A to F for sleeve. Measure from E towards the right 2 inches and mark it G. Fold the sleeve in two downwards and mark the crease on fold H. Cut along crease 4 inches to I, and curve from I to G for the neck slope. For the side curves, fold the sleeve down from F and follow the curve of the sleeve for half its length J, and slope from J to C. Open the pattern, and the half is complete.

Lay pattern lengthwise on a piece of material double the length, folded so as to have no seam at the shoulder, and cut out, leaving $\frac{1}{4}$ -inch turnings. Close the sides with a run and fell, sewed either by hand or machine. Girls' chemises are usually made without an opening in front to slip over the head. The chemise is gathered back and front as far as the straight part extends (I in diagram), and the gathers stroked. Length of band equals length of garment plus 1 inch for turnings. The depth is $\frac{3}{4}$ of an inch when finished. A lengthwise strip must be cut 2 inches in depth to allow for turnings, joined and fixed on, half being allowed each to back and front. The gathers should be hemmed on by hand. Gathers sewed by machine look uneven. A row of feather or coral stitching must ornament the band. Woven feather-stitching can be obtained at $\frac{1}{3}$ d. the yard, which is machined or hemmed on, and looks exceedingly well. Torchon lace or embroidery, whipped and sewed on, or everlasting trimming, which can be had in pretty designs at $1\frac{1}{2}$ d. the yard, is the most suitable trimming for calico. For flannel or wincey, a strip of the same width, the edge embroidered, is very good. In deciding the amount of fulness for trimming allow once and a half the length required; for a band 1 yard long, $1\frac{1}{2}$ yard of trimming will be requisite.

Quantity of material: Calico, 32 inches wide, $1\frac{1}{2}$ yard at 5d.; Flannel, 28 inches wide, $1\frac{1}{2}$ yard at 1s.; Wincey, 48 inches wide, $1\frac{1}{2}$ yard at 1s. 6d.; Trimming, 3 yards.

By obtaining extra width in wincey two garments may be cut side by side.

Children's Knickerbockers or Drawers.—Smallest size for child from 2 to 3 years of age. These drawers are little more than a bag with openings for the legs, and the waist put into a band. It is not often needful to vary the size, as little "fit" is required. Make the length 15 inches, and the width 22 inches. Take a piece of paper this size and fold it in two lengthwise, and mark the corners A, B, C, D (see Plate A, fig. 2). Keep the fold to the right hand. At half the distance between C and D mark E. At the same distance from C upwards mark F. Cut from E to F for the openings of the legs. To slope the top, measure down from B 2 inches and mark G. From G cut straight to a point above E (H), and from H curve to A. Open the paper, and it forms one-half of drawers, back and front being the same.

Take a piece of material (calico, cambric, flannel, or wincey) and fold it on the cross. To do this take one of the bottom corners and lay it along the selvedge evenly from the point upwards. The fold is then on the cross. Lay the pattern open on the fold, the side C, E, D

being the bottom, and cut out, leaving $\frac{1}{4}$ -inch turnings. Leave half the length of the side open, and join the remainder with a narrow run and fell. The legs are faced with a crossway piece $\frac{1}{4}$ inch wide, and should have lace or embroidery full on as described (in the chemise). Face the side openings with false hems, the back with a single and the front with a double false hem.

The front waistband is about 12 inches long, and the back 11 inches, one inch narrower. The bands have three button-holes each to correspond with buttons on strong bodice. Fine cotton should be used for sewing, and the "finish" of the garments of small children should be particularly neat.

1 yard of calico and $1\frac{1}{2}$ yards of trimming required.

Girls' Knickerbockers.—To cut pattern. Take length required from hip to knee, say 21 inches. The width is once and one-third the length, i.e. $21 + 7 = 28$ width. Take a piece of paper this size and fold it in two lengthwise. Keep the fold to the right hand. Mark corners A, B, C, D (see Plate B, fig. 1). Measure from C one-third the length of D C, and mark E. From C mark one quarter the length C A, and mark F. Slope from E to F for inside of leg. From B measure one-eighth of line B D, and mark G. From A measure in 3 inches H, and cut from F to H. This is the back. On the upper piece of paper mark I opposite G on line H F, and 2 inches in mark J. Cut from F to J and from J to G. This forms the front of the garment. For the slope of the back waist cut from H to G. If the lettering is carefully followed there will be no difficulty in cutting out this pattern. Girls' knickerbockers are made with the length of the pattern laid on the length of the material. Great care must be taken in the pinning together, so that the two fronts come together and the two backs together (the fronts being the smaller pieces). The method of making up is exactly the same as that of the "first drawers", only that the lower parts of the legs must be gathered all round and fixed into a band that is large enough to slip over the knee. The bands should be 1 inch deep when finished, and made the selvedge-way of the material, cut $2\frac{1}{2}$ inches deep to allow turnings, and joined neatly before being put on. The gathers must be hemmed on by hand.

$1\frac{1}{4}$ to $2\frac{1}{4}$ yards of material required.

1 yard of edging.

Combinations.—The drawers are made up after the above patterns (girls' knickerbockers), and the bodice almost the same as the upper part of the chemise, the garment being, as the name signifies, a combination of these two garments.

To cut the bodice. Take the length from shoulder to waist straight down the body, for example 12 inches, this gives the length, and add to it one-third for width, $12 + 4 = 16$. Take a piece of paper this size, 12×16 , and fold it into two lengthwise, and mark the corners A, B, C, D respectively (see Plate A, fig. 3). The sleeve takes half the length, which

is found by folding the paper in two. Mark the crease E. From A measure in $1\frac{1}{2}$ inches and mark F. Curve from E to F for the sleeve. Measure in from F 2 inches and mark G. Fold the sleeve in half downward and mark the crease on fold H. Cut along crease 3 inches to I, and curve from I to G. Fold the sleeve down from E and follow the curve for the side seam to J. Cut down the middle of the back from neck to waist for opening.

Make the bodice the same as the upper part of the chemise, with the exception of opening it from neck to waist at the back. Finish this opening with $\frac{3}{4}$ -inch hem on the under side and a false hem of $\frac{1}{2}$ inch on the upper side and close with buttons and button-holes, and finish as directed in the "chemise". Follow the directions for making up girls' knickerbockers, with the exception of the band at the front waist. Make this in two pieces instead of double, and insert the bodice gathered to the size. The bodice and the drawers at the back must each have a band, and the latter must be buttoned on the former with buttons and button-holes. This pattern makes an exceedingly neat and comfortable garment, either in calico, pretty striped flannel, or wincey. It is economical in material, and takes less making than two separate garments.

Night-dress.—For this a bodice pattern will be required (which will be referred to under "Dressmaking"), and from it the yoke is cut. Place the back and front shoulders together as in Plate B, fig. 2. Place the back to the edge of the paper and cut out 4 inches deep back and front, and with $\frac{1}{2}$ -inch margin all round, as an under garment is required looser than a dress. This yoke is useful in dressmaking also. For the skirt, take the length from the shoulder to the ground, the extra length given by the yoke will allow for turnings and hems. Take two lengths of material 36 inches wide, and gore from each side 6 inches. This makes the night-dress 36 inches at the bottom and 24 inches at the top. It is not necessary to cut this in paper. For the sleeve (Plate C) take the length from shoulder to wrist, with the elbow bent; the cuff will make the extra length taken up in turnings. Take one width of material the length required, and to cut the sleeve take top right-hand corner A and fold it down to the bottom left-hand corner B and cut along the crease. This makes a sleeve like a shirt sleeve, only wider. Each sleeve will have one selvedge and one sloped piece. Fold the selvedge on to the crossway piece so that the sleeve lies flat, and round off the superfluous pieces top and bottom. The yoke is cut by laying the back of the pattern on a lengthwise fold of the material and cutting accordingly.

Join the sides with run and fell, leaving 6 inches for the insertion of the sleeve. Open the front for 10 inches, this with the length of the yoke will make the opening 14 inches in all. Gather the skirt portion at the top, back, and front to within 3 inches of the side seams, and stroke the gathers; turn the edges of the yoke in on every side but the neck so that the raw edges are invisible, and fix the gathers into the yoke. The under side of the front has a hem $\frac{1}{2}$ inch wide, and the upper side

is joined on to the right side with a false hem stitched or feather-stitched for ornament. The sleeves must be inserted with a run and fell, all the fulness being gathered and put into the yoke. The neck and sleeves are usually finished with bands from 1 inch to $1\frac{1}{2}$, according to fancy, and the front closed with buttons and button-holes.

3 to 4 yards of material required.

2 to 3 yards of edging required.

Boy's Print or Flannel Shirt.—The proportions taken from collar-length are.

Length always double collar-length.

Width „ one and a half times the collar-length.

For example:

Collar, 10 inches; length, 20 inches; width, 15 inches.

„ 12 „ „ 24 „ „ 18 „

„ 14 „ „ 28 „ „ 21 „

For first size take a piece of paper 20×15 inches (the back only will be cut), and fold in two lengthwise. Mark the corners respectively A, B, C, D (see Plate D, fig. 1). From A measure inwards 1 inch for small sizes, $1\frac{1}{2}$ inches for larger sizes, and mark E. From A measure down one quarter the length, and mark F. Curve from E to F for the arm-hole. Round off the corner C. The front is the same as the back, only $2\frac{1}{2}$ to 3 inches shorter. To cut the sleeve, take a piece of paper the length from shoulder to wrist outside the arm, elbow bent, or usually the collar-length with one quarter added, and 24 to 26 inches wide. From the right-hand top corner A (see Plate D, fig. 2) measure in 16 inches C, from the bottom left-hand corner B measure in 16 inches D and cut from C to D. Round off edges as in the night-dress sleeve.

A night-shirt is cut out the same as a shirt, but should be made from 4 to 6 inches longer. The neck and front are cut during the making up.

Flannel Shirt.—Lay the paper pattern on the material, folded double crosswise, not crossway, so as to avoid a seam at the shoulder, the front being $2\frac{1}{2}$ to 3 inches shorter, and cut back and front together, rounding the corners separately. Cut the sleeve according to pattern, laying the straight edge of the pattern parallel with the selvedge. Cut the front opening half the length of the front, and let A be half an inch to the left side, making the hem a little longer than the opening and machining it all round. Shirts fasten from left to right, so the front piece will be on the left side; on the other side make a narrow hem. Hem the bottom with a very narrow hem, leaving the side slits one-quarter the length of the front. Close the sides, as in other under-garments, with run and fell, and insert the sleeve, putting any fulness gathered at the top. Leave the sleeves open at the wrist half the width of the cuffs, so that they may iron flat, and make collar and cuffs the depth preferred. The sleeves and bottom slits are strengthened with gussets. The neck must be cut from a pattern;

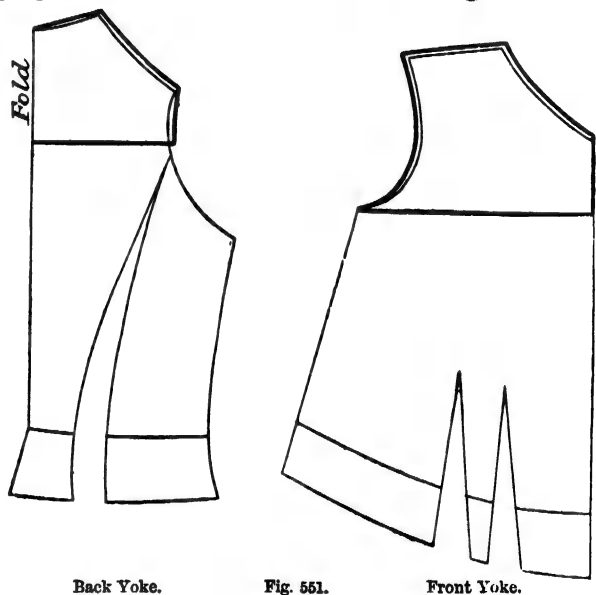
it is impossible to cut it correctly from a scale. Take a circle in paper the diameter of which is one-third of the collar, fold this circle in two, and flatten a little the opposite sides and mark the fold as in diagram A and B. Open and fold down again the opposite way from A towards B one-eighth of the diameter. Pin the front of the shirt together as it will be when finished, lay the creased line on the fold of the shoulder, having A in the middle of the back and B in the middle of the front; pin well and cut carefully. A double band rounded at each end makes the collar. Cuffs are usually 3 to 4 inches deep, rounded at the ends, and about 7 inches long, and should have pearl buttons and button-holes, or double button-holes for studs, and the front is closed in the same manner.

GIRLS' DRESSES.

Before attempting dressmaking a good bodice pattern must be obtained, either by buying a ready-made pattern, by drafting a pattern by one of the many systems, or by ripping an old bodice which fits and taking the exact pattern from that in paper. Girls' dresses are usually made either with a blouse bodice, with a yoke and the skirt hanging from it, or with a yoke and the fulness confined in with a band attached to the skirt. The yokes may be square or pointed.

For the blouse bodice take the middle back of the bodice pattern, and from it cut a yoke twofold and 3 inches in depth, measuring from the back neck (see fig. 551).

Measure the length from shoulder to front waist and add 3 inches. This 3 inches is for turnings, and to allow the blouse to overhang the skirt band. To cut out the front, one width of material 36 inches wide is required. The right side must have a box pleat, and this must be allowed for. The left side will be finished with a hem. Make one side 16 inches wide, and the other 20 inches to allow for box pleat. Make the box pleat by sewing a hem $1\frac{1}{2}$ inches wide, and then opening it flat and



Back Yoke.

Fig. 551.

Front Yoke.

machining it down the two sides. Make the one-inch hem on the other side. Pin the two pieces together, and cut from pattern shoulder, arm-hole, and side seam. (A girl's pattern does not usually have an under-arm piece.) For the back take length from neck to waist; this will make back and front the same length, as the yoke gives the 3 inches extra in front; and take a piece of material this length and 20 inches wide. Fix this into the back yoke, leaving 3 inches plain at each end and 2 inches beyond the yoke, and cut the arm-hole and side seam from the back pattern. Blouse seams are closed with a French hem; that is, a seam sewed first on the right side and then on the wrong, so as to cover all edges. Fix the front shoulder into the yoke, and sew. Roughly gather the fronts and cut according to neck of pattern, then gather neatly and sew into neck-band. The front must be closed either with button-holes above and below for studs, or with small buttons and button-holes. A hem of 1 inch is made round the waist, and elastic or tape is run into it, which keeps the blouse very neat. This blouse should have bishop sleeves; that is, unlined sleeves hanging loose from shoulder to wrist and gathered into a band. To make

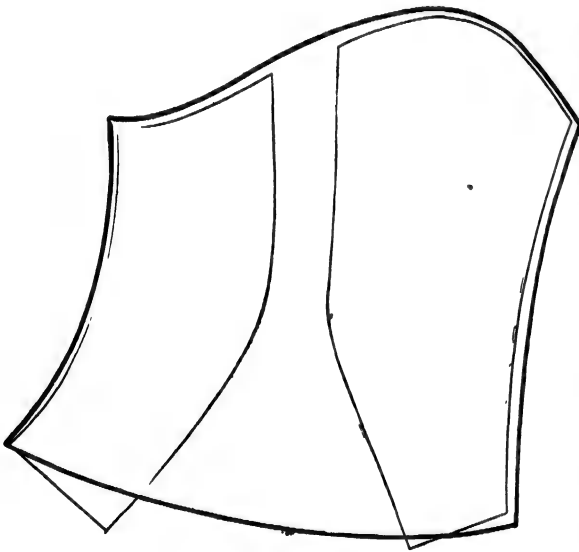


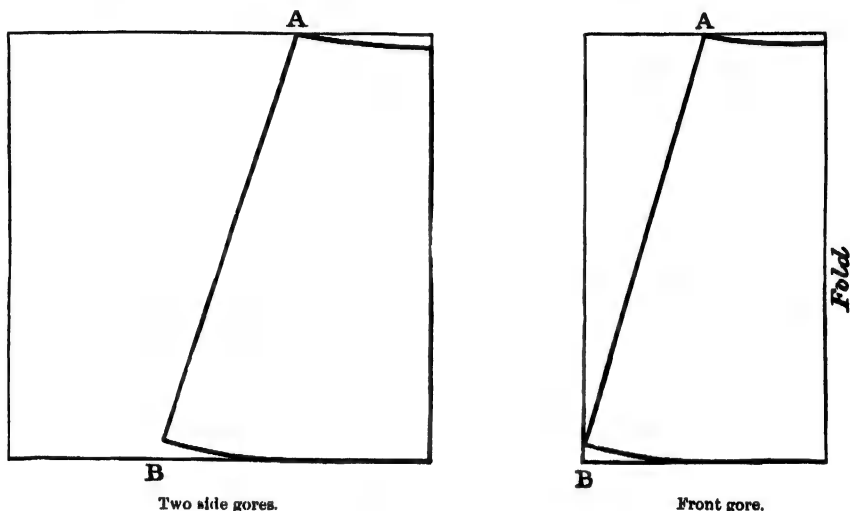
Fig. 552.—Bishop Sleeve.

bishop sleeve, take the sleeve pattern (see fig. 552) and arrange it so that the top points are opposite, and lay the outside edge of the sleeve on a fold of material, allowing from 2 to 4 inches extra in width, according to fashion. Cut the top of the under-sleeve precisely like the pattern, only with less curve. Join the sleeve with a French hem, and gather at the wrist and sew into a band or cuff. Gather the sleeve at the top as far as the under-sleeve, fix into the hole, sew, and overcast.

The blouse is then made. This pattern is very successful made in print, muslin, flannel, flannelette, or blue serge. It requires from $2\frac{1}{2}$ to 3 yards of material single, or from 1 to $1\frac{1}{2}$ yards double width.

For a skirt to go with this blouse, take, if material is single-width, four lengths of material, two plain for the back. Gore the side breadths, if reversible, in the following manner (see fig. 553):—Fold the material in three lengthwise, and notch each fold top and bottom. Cut from the first notch, A, at the top to the second notch, B, at the bottom, and this will give two side gores alike. For the front take another breadth, and fold

into four lengthwise, and notch at the top folds. Cut from the second notch, A, at the top to B, and this will give a front gore sloped at both sides. Join the front gore to the side gore, with the straight side of the latter to the front. Join the side gores to the back and the back breadths together, leaving openings for pocket and placket-hole. The skirt must be pinned and sewed from the top down, put on to the band, and the bottom evenly rounded, as the sloped sides will be longer than the plain ones. Before putting on band the front and side breadths require sloping to fit the waist. Measure down half an inch from the notch which indicates the



Two side gores.

Front gore.

Fig. 553. — Skirt of 36-inch reversible material.

middle of the front breadth, and gradually slope off to the top of the side gore nearest the back. Girls' dresses are slightly gathered all round, so as to sit easily on the figure, and all the superfluous fulness gathered into 4 inches at the back. (For pockets, placket-holes, and general finishing, see "Home Dressmaking".) If the material is double-width, take one whole breadth for the back, half a breadth for the front, and gore one breadth for the sides. This will give a narrower front breadth and wider gores.

Required: 4 lengths of single-width material, from 4 to 5 yards, according to length of skirt; $2\frac{1}{2}$ lengths double-width, about $2\frac{1}{2}$ yards, leaving half a breadth over.

Girl's Yoked Dress.—These dresses are only made for young girls from two to six years of age.

Cut a back yoke according to the pattern described above (see fig. 551). But cut also a front yoke by placing the bodice front on a fold of material, join the front to the back at the shoulders, and cut the back in two pieces so as to fasten down the back. Finish the yoke with neck-band and any

trimming preferred. For smart dresses the yoke looks well covered with lace. Take the length required from the yoke, and allow for a 4-inch hem. Make the skirt about 3 yards wide. Gather the top of it with three rows

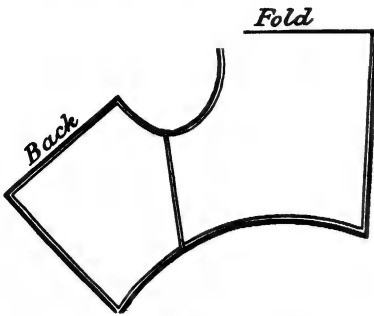


Fig. 554.—Yoke to fasten at back.
No shoulder seam.

of gathering, leaving a frill of half an inch, and dispose it evenly outside the yoke, leaving 2 inches beyond yoke, and sewing it firmly on; then cut the arm-holes according to pattern. Make a bishop sleeve, and gather that also with three rows of gathering, leaving a frill for a trimming. This is very pretty for thin dresses of silk, cashmere, nuns' veiling, or muslin. The gathering, which is for ornament, should be done with silk the same colour as the material, and the hem sewed also with silk.

Girl's Yoked Bodice.—Make a bodice according to the pattern in lining, leaving it unattached at shoulders and side seam, and arranging for the fastening to be done at the back. Cover the lining back and front the depth preferred, from 3 to 4 inches, with material. Measure the width at widest part of the bodice, and allow 4 inches extra for fulness back and front, and cut the material the length from bottom of yoke to waist, allowing 2 inches for turnings and a heading. Arrange the fulness as described in a yoked blouse, cut out superfluous material from arm-hole, and tack firmly round. Arrange the fulness at the waist in small pleats, occupying a space of about 1 inch in front and the same in each side of the back, tack firmly, and finish the waist with a strong binding or cord, into which the skirt should be sewed; a belt or sash must be worn with a dress made in this way. No bones are required in children's dresses. The finishing in every other respect is the same as that described in "Home Dressmaking".

Girls' Dressing-gowns.—Girls' dressing-gowns fasten in front, therefore a yoke is made as described above, placing the back on a fold of material, having no shoulder seam, and the depth at least 4 inches. Dressing-gowns should be 2 or 3 inches on the ground, therefore the length measured from shoulder to feet will supply this and leave 1 or 2 inches for the hem. If a deep hem be preferred, add 3 inches to the length. Flannelette, melton flannel, or thick cashmere make warm and pretty dressing-gowns. A dressing-gown should measure 3 yards round the bottom, 2 yards being given to the front and 1 yard to the back. Gore off from the front breadths one-third, and the same from the back. Join the breadths together, make a 2-inch hem for the fronts, curve out the arm-hole according to the pattern; gather back and front with two or three rows of gathering, and sew on to the yoke. Bishop sleeves are usual, but a sleeve may be made from the ordinary pattern, allowing 1-inch turnings everywhere to make the sleeve more roomy. A large turned-down collar, with a ruching of the material "pinked" at the edge, is the most effective

trimming, and plain turned-back cuffs about 4 inches deep make a good finish. The waist must be drawn in with a girdle or waistband. The whole should be loose-fitting.

Required: 4 to 5 yards of single-width material.

„ 2 to 3 „ double-width „

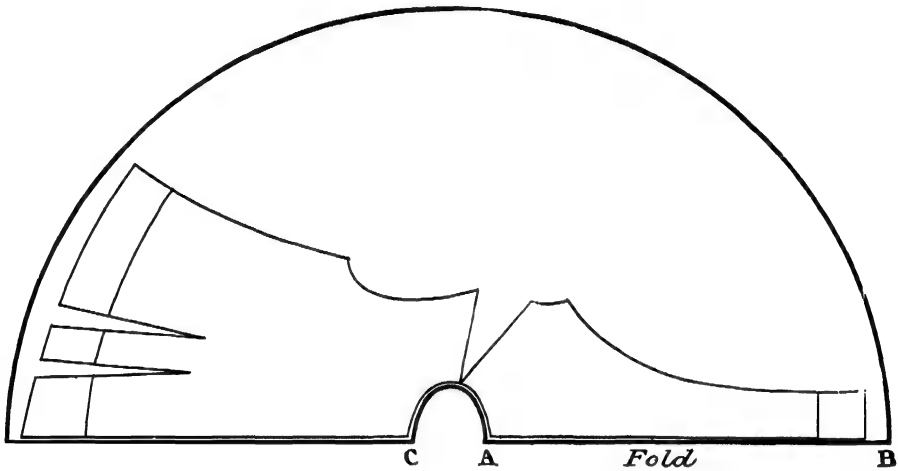


Fig. 555.—Circular Cape.

Girl's Circular Cape.—Take the bodice pattern and place front and middle back on the same straight line, with points of the shoulders at the

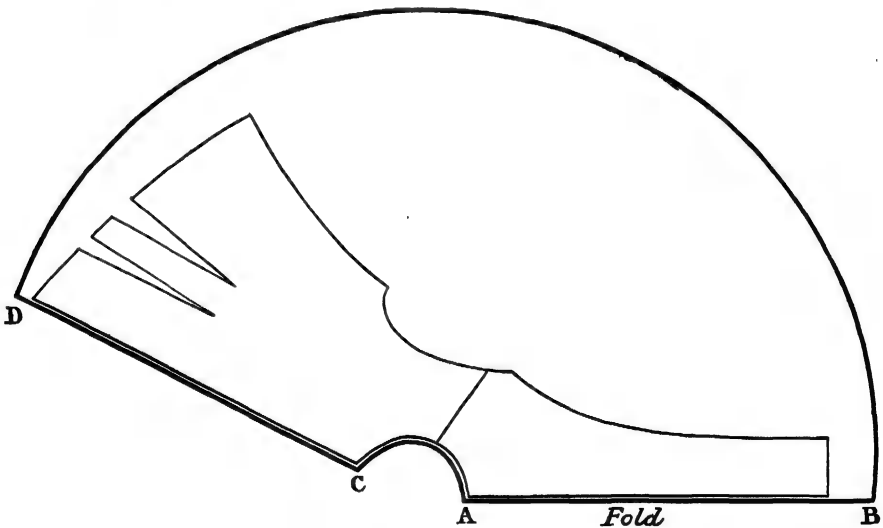


Fig. 556.—Three-quarter Cape.

neck meeting. Decide on the length required, and mark down from A to B (fig. 555). Measure from C to D the same length, less 1 inch, and curve evenly from B to D. For a three-quarter cape (fig. 556) place the bodice

pattern with the shoulders meeting so that there is no joining on the shoulders. Measure and cut as in the previous diagram. The making of capes is very simple. The back of the pattern must be placed in a crosswise fold, that is, a fold across the breadth, not crossway, of double-width material and cut, allowing $\frac{1}{2}$ -inch turnings. Tack the cape $\frac{1}{2}$ inch up all round, machine and finish by sewing Paris binding invisibly over. If the cloth is thin, it must be lined with silk or sateen. It is not then necessary to use Paris binding after the machining. The lining is cut

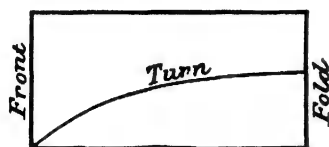


Fig. 557. — Collar.

exactly the size of the cape and slip-stitched in. Reversible cloths which have a simulated lining are most serviceable.

Quantity of material twice the length B.D. Both capes are completed with a turned-down collar (fig. 557), made by cutting an inside and outside selvedge-way

the length required and the depth preferred, sewing the two right sides together, turning and machining the top edge and ends. The cape must be inserted between the two folds of the collar, which must be neatly sewed on. Strong hooks and eyes, worked over with silk, close the capes in front.

BOYS' SERGE SUIT.

Boys' serge suits are quite within the capacity of a woman who can make girls' dresses. First obtain a pattern by ripping an old suit and cutting the pattern exactly in paper, or by buying one. Choose a good strong serge, warranted "shrunk". What is called army and navy serge is specially suited for boys' clothes. Use silk for sewing, and join all seams and press on a covered roller. If there is difficulty in making the seams flat, lay on each length of seam a damp tape and then press with a very hot iron. Sew a second time on the right side, on each side of seam, so that two rows of sewing show on the right side. The sailor collar should be lined with tailors' canvas to stiffen it. Good pressing and neatness of finish will prevent these clothes from looking "home-made". The cost will be considerably less than ready-made ones, and the material will probably be infinitely more durable.

MILLINERY FOR YOUNG CHILDREN.

Two kinds of little bonnets are very easily made from the following patterns, and various modifications and amplifications will suggest themselves by a little study of the prevailing fashions in children's millinery.

Child's French Bonnet.—Cut the pattern first in paper. This saves the material. Three measurements are necessary—

1st. Length of head from ear to ear.

2nd. Length from ear to ear round the back of neck.

3rd. Length of head from nape to forehead.

Make a band 4 or 5 inches deep, the breadth of head from ear to ear, and curve at corners on one side. Draw a circle on paper; size of diameter equal to length of forehead to nape of neck, with 4 inches added. This is to make a high crown. (If a pair of compasses is not available, a substitute may be made with a piece of thread or string. Cut off a length rather longer than the diameter required, and fold in two. Pass a pin through the crossed ends, and fix this point, *i.e.* the centre of the circle, on the paper, which should be laid on a flat surface. Insert a pencil at the loop, and the device is complete.) Form this circle into an oval by cutting $\frac{3}{4}$ of an inch from each side, and make the bottom straight by cutting off $1\frac{1}{2}$ inches. Cut the band in material, muslin lining and inner lining (of silk by preference). Cut the crown in material and lining. Mark the middle of the crown top and bottom with a notch. Mark the middle of the band with a notch. Gather the crown with two rows of gathering (using silk), leaving 4 inches at each end plain. Make the band by tacking in the muslin, turning and tacking the outer edge of the band and slip-stitching in. Gather the inner lining in the same manner as the crown, but having only one row of gathering, and slip-stitch neatly in. Take the measurement length from ear to ear round the back of neck, and pleat up the crown at the straight side until it is of the same size. Bind with material. Attach strings at the junction of band and crown, and trim in any desired fashion. A trimming of swansdown is good, beaver is more useful, and for summer wear a ruching of lace and white ribbon bow look well on any material. (Fig. 558.)



Fig. 558.—Child's French Bonnet.

Child's Dutch Bonnet.—Follow the same directions as before, only subtract the width of band from square of paper before cutting out, so that the crown lies flat. No gathers are required, as the crown fits the band exactly. Very small children look particularly pretty in these close bonnets,

and for summer wear they are usually made in muslin and needlework insertion, and have the distinct advantage of being much easier to "get up" than the ordinary sun-bonnet drawn up by cords. Half a yard of



Fig. 559.—Child's Dutch Bonnet.

material and lining will make the French bonnet, and rather less the Dutch bonnet. The same will be required of muslin if the crown is preferred stiff. Small pieces of material suitable for millinery can often be found very cheap at remnant sales. (Fig. 559.)

Tam o' Shanter.—Cut out three rounds in material, muslin and inner lining, the size desired; 14 inches being about the smallest size, and 22 inches the largest. Notch at the halves and the quarters, and run round the edge with two or three rows of gathering. Make a double band of material lined with muslin. Mark halves and quarters, as in the crown, and insert the edges of the crown between the double band, and run neatly together.

From $\frac{1}{2}$ to $\frac{3}{4}$ of a yard of material is required. Art velveteens look very pretty for young children, and boys' hats usually have quills and a bow at the side. (Fig. 559.)

There is a second pattern suitable for boys from two to three years of age. Take a piece of material $1\frac{1}{4}$ to $1\frac{1}{2}$ yards in length. Line with muslin,



Fig. 560.—Tam o' Shanter.

join the two ends, and press. Arrange two rows of gathers top and bottom, draw up gathers tightly, and finish the top with a large wooden button covered with the material. Fix the bottom gathers into a band the size of

head, placing them evenly as described above, and finish with quills and a bow, or cord and tassels. (Fig. 561.)

The following pattern is suitable for girls from eight to twelve years of age. Take the size of the crown required, and cut two rounds each of lining, muslin, and material. Lay the two pieces of material together, face to face, one piece of muslin above and below, the two pieces of lining on the top. Mark the size of the head on the two outer pieces, and cut out the superfluous material from one piece each of lining, muslin, and material.



Fig. 561.—Tam o' Shanter, with bow and quills.

Sew round the outer edge. Turn the hat right side out. It will then have the material outside and the two pieces of lining inside, and no rough edges showing. Fix into a band and trim as liked. This hat looks stylish with the left side turned up a little and fixed into place by quills. An endless variety of pretty and stylish hats may be made with these patterns as the foundations.

For Bows see "Home Dressmaking".

ADAPTATION OF GARMENTS.

When there are several girls in the family, it is an economy to have their coats all alike, so that they may be handed down from one to the other without exciting the remarks so much dreaded by children on having to wear their elder sisters' garments. Again, if it is necessary for children to wear their mother's garments after she has finished with them, she should avoid all large and striking patterns, as they are so easily remembered; and although it is excellent management to adapt garments to other wearers, it is bad management so to adapt them that they are at once recognized as having belonged to some other person.

In making a child's dress from that of a grown-up person, first of all rip the dress, pick out every stitch, brush, and, if suitable, sponge and iron. Have a pattern cut in paper and plan the dress, using the best part for the front breadth, the sleeves, and the front of the bodice, which are most seen and have the hardest wear. Make up on a fresh lining,

and if it is necessary to join, be careful to place the pieces the same way of the stuff, so that if a twill it runs in the same direction, if a pattern it is continuous, and press all joinings before placing on the lining. Spare no trouble to make the dress look like a new one. Never attempt to adapt a dress made for an adult, to a child, without completely ripping the bodice and making it up afresh. If the bodice be too much worn to use, a skirt, if made of plain material, or material with a small design, makes excellent blouses; two may often be obtained from a good-sized skirt, or if the material is a little short, the yoke, collar, and waistband may be made of velveteen or some material entirely different.

Under-skirts may often be utilized for children by simply cutting off the hem, which is the part that wears first, and re-hemming and making the waist to fit. Outdoor jackets, too, will cut down into pelisses or long coats. These again must be entirely ripped, especially the sleeves, the pattern laid on, and the coat cut out to the best advantage. If the sleeves, for instance, are simply cut down the elbow will be in the wrong place, and no amount of manipulation will ever make the sleeve look as if it belonged to the wearer.

Under-garments are more difficult of adaptation, as the wear is not evenly distributed. Woollen combinations that have been carelessly washed adapt themselves to smaller people. From the bodice of woven combinations a vest may be made, using the best part of the legs to cut out the sleeves. In sewing woven garments, sew with the machine with silk and a loose tension, and sew the back of the seam flat so that two rows of stitching show on the outside. If no machine can be used, back-stitch by hand and herring-bone the edges on each side. If the threads are drawn too tightly, the sewing will crack in wear with the elasticity of the garment. From the best parts of a night-dress a small chemise or pair of drawers may be made. Avoid using the upper part of the back, which always wears out first, and make no use of the sleeves. Never put any thin parts into new garments. Chemises and drawers are not worth alteration, as there is so little unworn material in them.

All old woven, not knitted, stockings that are too far gone to darn should have the feet cut off and the legs kept for re-footing. The process is described under "Mending and Darning". Small vests are sometimes made out of the legs of two old stockings, the legs cut open and laid face to face, a pattern laid on, and the vest cut from it. As stockings are usually black or dark-coloured, this plan does not commend itself to the affluent; but it is a suggestion which may be carried out, and would keep destitute children warm during the winter. Flannel skirts may also be made into small vests; good parts are to be found under the tucks.

Boys' suits can be made from the suits of full-grown persons. Rip the coat entirely to pieces, brush, and pick out the stitches, and iron over the lining. Have a pattern ready, and endeavour to keep the pockets as before, in the same relative position. The button-holes have generally

to be cut off and fresh ones made. Even boys' knickerbockers cannot be satisfactorily made from trousers without following this plan, as no taking in here, and letting out there, will make a satisfactory piece of work without the proper planning and cutting.

In conclusion, those who wish their children to look well dressed, and have to consider every penny spent, should, before purchasing any garment or material for the older members of the family, ask themselves this question, "How will this afterwards do for the children?" and if the answer is "Not at all", let the wise woman at once refrain from purchasing that particular article, and find something that will answer the requirements of both the present and the prospective wearer.

CHILDREN'S AMUSEMENTS.

TABLEAUX.

Tableaux are, as a rule, a great delight to children. There is all the pleasure of "dressing up", the excitement and work of preparation, and none of the toil of having to learn a rôle as in theatricals. Children of all ages can take part in them, and they may be produced on a large scale in some public room for the benefit of a charity, or on a small scale in the back drawing-room for the amusement of a few visitors. No scenery is required, and the costumes may all be made at home, affording occupation during the winter evenings for the elder girls, while the boys can employ their skill in making stage properties. A bundle of songs, a book of poems, and a volume of fairy tales will provide plenty of subjects. The only "grown-ups" who will be wanted to appear will be those who sing the songs or read the stories illustrated by the tableaux.

Whether the performance takes place in the drawing-room or in a public room with a real platform, the background of the pictures must be of plain neutral tint. For this stretch a stout cord across the back of the stage, and another on each side, forming a "box-scene", and over the cords hang lengths of any dim-tinted substantial drapery, such as felt, wincey, serge, cloth, &c. Old table covers answer very well, if not too bright in tint. Paper must not be used; it is too inflammable.

In front there must be a row of foot-lights. To make these, procure some 1-lb. coffee tins, and cut them downwards into halves. Fasten these on to a deal plank with long nails driven through from beneath, and use the spikes of the nails to hold the candles. Carriage candles are the best, being thick and short. The plank should be tilted backwards, and the polished tin will reflect the light up on to the picture. Some lamps at each side will be wanted, and, if possible, a brilliant hanging lamp overhead.

In front of the stage heavy curtains must be hung from a rod, which should be well greased so that the rings may slip easily, for nothing is more unfortunate in tableaux than any hitch in the drawing of the curtains, especially where children are the performers.

Single figures are the easiest, but in the case of tiny children groups are better. Inexpensive art muslin costumes will answer admirably for girls, especially if Kate Greenaway dresses are used, and sateen will make most of the boys' clothes. In many cases, for instance in No. 1 below, the children's own frocks may be utilized.

The following tableaux may be useful either in themselves or as furnishing hints. Where the subject illustrated is from a song, this should first be sung before the curtain is drawn, and the air played softly all the time during which the picture is being shown. If the subject is from a poem or written work, this (or, if it is long, as much as is necessary to explain the picture) should first be read.

No. 1. "Jack's the Boy" (song from the "Geisha"). Jack, a boy in sailor clothes, stands in the centre, surrounded by a group of girls in serge skirts, white blouses, scarlet "fishwife" aprons (made of art muslin), and white caps such as are worn by the peasants of Brittany. In the background another girl stands disconsolate with her handkerchief to her eyes.

No. 2. "'Way down upon the Swanee River" (the song "The Old Folks at Home"). A girl lies in a hammock or low chair, and a boy serenades her with a banjo. She is dressed in white, with draperies of orange-coloured muslin about her. The boy is wearing white trousers and loose shirt, with a scarlet cummerbund round his waist, and a large planter's hat.

No. 3. "The May Queen." The first part of Tennyson's "May Queen" should be read, and the picture should show the crowning of the Queen of May. This will introduce a number of little children if required, and all the dresses should be of Kate Greenaway type, made of art muslin.

No. 4. "The Belle of Japan" (fig. 562). This can be a single figure, and will be most effective if properly carried out. "The Amorous Goldfish" from the "Geisha" can be sung. A girl in Japanese dress kneels by a bowl of goldfish with water dropping from her fingers as if she had just dipped them in the bowl. The dress is easily made of gaudy-coloured cretonne, the hair dressed high on the top, and roses behind the ears on each side. The tableau will be improved by a background consisting of a Japanese screen with an Oriental shawl or rug over the end, an Oriental rug at the girl's feet, and a pot of tall chrysanthemums by her side.

No. 5. "Good-night." There are various glees which may be sung to



Fig 562. —Children's Tableau—"The Belle of Japan".

illustrate this tableau, such as the plantation song "Good-night", the glee "Sleep, Beloved, Sleep", or "Sleep, Gentle Lady". The picture should be a Pierrot kissing the hand of Pierrette over the wall. The dresses can be made in white sateen and art muslin, with small woollen balls for ornaments, and the wall may be made of brown paper stretched on a frame and painted red and black to represent bricks. Pierrette stands behind it. The lights should be lowered, excepting one strong lamp; pale-blue paper should be placed in front of this, and the light thrown on to the figures.

All these tableaux are capable of being carried out by persons with very little experience.

A picture may be shown twice, but each exposure should not last more than one minute; if this time is exceeded the expression on the faces will become strained.

Children's Plays.—A great number of pretty plays have been written for children. Some are called Operettas; but the name need not frighten small performers, the songs and choruses being of the simplest kind.

The mode of arranging the stage is precisely the same as that for the tableaux, excepting that usually something more than a plain gray background will be needed. In a play where the scene is a room any ordinary back drawing-room with curtains to pull across the front will be all that is required, but a fairy play will want a woodland background. If the children have to arrange this themselves (and it is always well to try and bring out a child's inventive faculties), let there be a background of pale-green wall-paper hung upon a tightly-stretched rope (as described in the case of tableaux), and in front of this have some tall "trees". To make these, get some tubs or boxes from the grocer, and nail virgin cork round the front. Fill them tightly with mould, and plant a tall batten or light pole in each. On to these fasten some green boughs of laurel or fir with strong wire and cord to give as much the appearance of a tree as possible. Three or four of these will be wanted at the back, and two on each side to form "wings", and if some little coloured lamps are hung from the branches, the effect will be very pretty. Between the tubs there can be some pots of tall ferns, the pots themselves being covered with moss. Cover the floor with a plain green carpet or some green baize.

A real scene is not difficult to make. First get a carpenter to knock together a square frame of lath just the size required, on to which the scene can be nailed. It had better be painted in some empty room, as the task is not a clean one by any means, and fixed up when finished. Get some canvas or unbleached calico, and sew it in lengths until it is of the proper width, then size it all over and leave it to dry. Some dry colours, such as house-painters use, can be procured from the colourman; they should be mixed with water in large pots, and a little size should be added to each. The only colours required will be blue, yellow, red, green, brown, and black, together with plenty of ordinary whiting. These must be applied with large house-painters' brushes; a little picture as a copy to

work by will be found advantageous. Only the coarsest work is needed, as it will look more effective than any fine painting; in fact, detail does not show. Girls and boys with a certain amount of artistic talent will spend the happiest holidays making scenes for their "theatre". It is very fascinating work, but they should all be provided with artists' overalls, as the paint splashes about amazingly.

If a window is needed, the frame should be of wood, with a piece of pale-blue paper at the back for daytime, or dark-blue paper for night, with perhaps a moon painted on it if it is not to be opened or shut during the performance. Some lengths of black tape nailed across will represent diamond panes. A mirror can be made of a wooden frame covered with gold paper, and inside a piece of canvas or calico painted pale-blue with two or three bold strokes of white slanting across it.

The seamstresses of the dramatic company may be employed in making costumes; art muslin, sateen, tinsel, and gold and silver paper will be all the materials required.

A point of great importance is the "make-up". It is less injurious to use grease-paints than the usual amateur supply of rouge, powder, and burnt cork. The make-up box should contain a large pot of vaseline, some clean soft rags, and two or three towels, grease-paints (three shades of red, one of black, and one of blue), some violet powder, some spirit gum for fixing false beards, and plenty of hair-pins and safety-pins. Before making up, rub the face all over lightly with cold cream to fill up the pores of the skin, and then apply the palest red paint, rubbing it on smoothly with the fingers. A deep red should colour the cheeks high up under the eyes and be carried on to the temples, and a touch of the same can be put on the forehead, chin, and ears, all to be softened off at the edges. The eyes should be darkened underneath, and a line of blue crayon put along the upper eyelid. The face can be just lightly dusted over with powder when finished. For wrinkles and "crow's feet" use the black crayon sharpened to a fine point. To remove the make-up, rub the face all over with cold cream, wipe this off with a rag, and then bathe in warm water.

Of course there must be an orchestra, but this will probably consist of a pianist only, who must know her work thoroughly, for on her will rest the responsibility of keeping the singers and dancers together. Songs, choruses, and dances must, first of all, be practised separately and made perfect. Then each actor may write out his or her part on paper, and stitch it into a brown-paper cover. For the first two or three rehearsals the actors should read their parts and get to know their positions and stage business, and then the books must be put away. The only remedy against stage fright is to rehearse so often and know the words so thoroughly, that at last the part becomes mechanical.

There should be two dressers, a property man, an acting manager, and a prompter. The dressers should keep each costume with all the accessories in a separate box or bundle, on which is the name of the wearer. The

property man should write out, in the following way, a list of all the small things required on the stage:—

1st Act.—Fan, bell, basket, 2 sticks, &c.

2nd Act.—Flowers, fruit, whistle, whip, cloak.

These he will keep on a table by him, just at the side of the stage, and hand up as required. The stage manager must arrange the scenery, see to the raising and dropping of the curtains, the lights, and general effects.

Impromptus.—Impromptu plays founded on nursery rhymes are a great amusement to children. They may be got up during a wet afternoon and performed without any accessories in the evening, though, of course, a double room with folding doors or curtains is a great advantage. "Little Red Riding Hood", for instance, is very popular and easy. The red cloak can be made with a curtain, table-cloth, or shawl; the grandmother will only want a mob-cap, spectacles, and a kerchief; and the wolf may be clothed in a fur hearth-rug, with a head made out of brown paper. "Cinderella", "The Sleeping Beauty", "Jack the Giant-killer", and other similar stories will make pretty plays.

Christmas Amusements.—For the Christmas-tree, see "Christmas and other Festivities", vol. vi. The "Magic Bubble" and the "Witch's Cave" are now sometimes substituted for the Christmas-tree, and are equally delightful. For the first-named two very large wooden hoops and some copper wire are required to form the framework of an enormous ball. The two hoops are tied slackly together at the back, but left loose in front. The ball is covered with white thin paper all over, but it is best covered in two separate halves, which can afterwards be joined together. When the time arrives, the ball is placed on a table, and a little boy dressed as a Pierrot stands inside it. The presents should be arranged inside the hoop if possible, and someone should stand at the back to hold it steady. When the children come in, the lights are turned very low, and different-coloured fires burnt to throw weird effects on the mysterious bubble. At a given signal the lights are turned up, and Pierrot bursts the bubble by pushing the two hoops apart, and emerges, making his bow to the surprised audience. He then distributes the presents.

The Witch's cave (fig. 563) may be constructed with tables placed so as to form an irregular square, and covered with brown paper bent into all sorts of shapes to represent rocks. It can be decorated with ferns and trailing ivy and various little fairy lamps. The lights in the room should be covered with pink shades. The witch is a little girl sitting inside on a stool. She wears a black dress with quaint designs in gold paper sewn on to it, a scarlet cloak, and a witch's hat. A stuffed black cat is perched on her shoulder, and she holds a broom in her hand. The showman, after an introductory speech, says: "Kind Witch, have you any good-luck for Tommy Brown?" whereupon she gets up and waves her broomstick, and someone from behind, who is invisible to the children, throws the parcel for

Tommy Brown down through an opening in the top of the cave. This is repeated till all the party have received their presents.

A child's party, where there is no Christmas-tree or substitute for it, must not be entirely "a dance". Many little ones do not care for the amusement, boys especially, and there is too much temptation to the elders to join in the dancing and leave the children to amuse themselves as best they may. The dances should be principally polkas and country-dances,



Fig. 563. — The Witch's Cave.

but it is best to start the party with a merry game, such as "Post". This wears off the shyness, and is a good way of introducing the little guests to one another.

The hostess should make out a private programme for herself, so that there should be no hesitating as to "what to do next". It might be something as follows:—

(1) General Post. (2) Polka. (3) Hunt the Slipper. (4) Country-dance. (5) Forfeits. (6) Polka. (7) Supper. (8) Polka. (9) Turn the Trencher. (10) Country-dance. (11) Waltz. (12) Blindman's Buff. (13) Polka. (14) Musical Chairs. (15) Sir Roger de Coverley.

The supper is put down pretty early, as the children get more festive after it; but the wise hostess will be careful about the menu, so that there may be no call for the doctor the next day. Chicken is a great *pièce de*

résistance—in fact, almost every child will choose it; there should also be jellies and blanc-manges galore, but no tippy cakes, trifles, or pastry. The sweets should be variously coloured and made pretty with garnishing, and quantities of crackers are always much enjoyed. The mothers of the little guests will be thankful afterwards that, though the supper looked pretty, it was really quite plain. A large empty room must be given up to the games and dances, but this may be made most attractive with draperies of art muslin—yellow being most effective—boughs of holly, and if possible a few flags. Plenty of light and plenty of lively music will ensure the success of the entertainment. In a big house, where two rooms are available, it is an excellent plan to have dances in one and games in the other.

Children's Bazaar.—Children are most charitable little beings as a rule, and it gives them the keenest pleasure to "do something to help the poor children". There are various charities in the poorest parts of London organized for the purpose of giving the waifs and strays of the slums a little fresh country air—a day of riotous enjoyment among real fields and trees, and the sum required for this is not large, even £10 will go a long way. In a country parish the children might form a small league amongst themselves to get up a bazaar every summer, the proceeds to be devoted to their poor little fellow-creatures in the town. Of course the elders must supervise, but the more the children do themselves the better.

The first thing is to obtain the use of a field or garden. Then, a day having been fixed on, notice, "weather permitting", must be sent to all friends and neighbours. This may be done in writing, as printing runs away with the profits. Then comes the question of stalls. Probably planks on trestles will be available, or some large nursery or kitchen tables may be borrowed. Let us suppose that there are to be five stalls. Each head stall-holder must do her own decoration, the cost to be taken from what she realizes by the sale of her goods. There must be a refreshment-stall; tea, cake, and bread-and-butter at 6d. a head will be found very profitable. The stall-holders here, both boys and girls, should have the caps and aprons of French cooks and white frocks or suits. Then comes the flower-stall, where flowers and ferns of all kinds are to be sold, as well as "button-holes", "sprays", and "baskets". The stall-holders may each be dressed to represent a flower; the rose, violet, daisy, lily might, for instance, be personified in this way. The other three stalls must chiefly be filled by contributions from kind friends; one should be for plain work, such as pinafores, babies' socks, little jackets, and so on; another for fancy work; and a third for art work, such as paintings, wood-carving, brassware, and all kinds of things which will employ both boys and girls during the long winter evenings.

Besides the stalls there can be various kinds of side-shows. A fairy-well, for example, in which for 3d. one can fish for a parcel sure to contain something pretty or useful; a post-office (built of laths and covered with painted calico), where for the same sum one will get a letter bearing a nice enclosure; an antiquity show (held in a tent), admission 2d., where

such works of art are to be seen as "An Odd Pair" (two odd shoes), "Pillars of Greece" (two bits of candle), "From the Depths of the Earth" (a lump of coal), "Companions of the Bath" (soap and sponge), and so on. Almost the greatest attraction at a children's bazaar will be the doll show (held in a good-sized tent), admission 2*d.* for adults and 1*d.* for children. At one end there should be a table on which some tableaux are arranged with dolls (small wooden stands will keep them in their positions). It is quite easy to arrange "A Wedding Party", "Darby and Joan", "Soldiers and Sailors", "In the Cotton Fields" (with black dolls), and others. In one such tableau called "A Warm Day" the floor can be strewn with sand, and nigger babies sprawl about with tiny (toy) turtles. Two niggers can carry a long hammock made of amber satin slung on two bone knitting-needles, and in this should recline a lady of colour with many beads and feathers and a tiny Japanese umbrella. The other tables in the tent should be filled with dolls for sale, of all sorts and prices. For the boys some athletic sports can easily be organized. The entrance fees, however small, will more than pay for the prizes, though these may very probably be provided by voluntary subscriptions. No other outlay will be wanted, as the hurdles, "obstacles" for the obstacle race, and sacks for the sack race, can without inconvenience be lent by the various families who are interested in the children's work.

PARLOUR GAMES.

A phrase with which most elders are familiar is that of "What shall we do next?" or "What shall we play at?" and this not alone among the children, but with their elders too, when they are gathered together for amusement. The augmented household at Christmas times, and family anniversaries, will need various suggestions to keep it happily occupied, and at parties one of the hostess's chief occupations is that of providing numerous suggestions for games which shall include a large number of players. There are a great many card games which can be made at home for the "elder youngsters", if one may call them so, and are very pleasant amusements for long evenings. In fact, these indoor recreations may be divided into two great classes, of card or writing games and games of action.

Shakespeare Game.—Among the amusing card games is the Shakespeare. This consists of two sets of cards, one bearing questions and the other answers, the latter being quotations from Shakespeare. The cards are dealt round equally, and each player in turn reads a question, to which the holder of the answering quotation must immediately respond by reading the words. If he does not, or if anyone reads the wrong quotation, the time-honoured forfeit is exacted. A specimen question

and answer, for instance, would be: "What did Romeo say when Juliet appeared at her window?"

" 'But soft, what light through yonder window breaks?
It is the East, and Juliet is the sun.' "

The quotations, of course, must have no reference to the play of their origin written on the cards with them. The same game can be varied to apply to any other well-known author, to mythology, in fact to almost any subject likely to be familiar to the players. Of course it is not fair to make it too erudite.

Aunt Hulda's Courtship.—A delightful American game is Aunt Hulda's Courtship. The story of a courtship is written, with many blanks. For every blank a quotation is written on a card, and the cards are dealt round to the players. One person reads the story and stops at the blanks, and at every halt a player in his turn must read the quotation from his top card, afterwards putting it at the bottom of his pack. Sometimes the results are most comic. When the reader has led us up to the point where the young man took Aunt Hulda's hand, it is a distinct shock to hear from another player that what he said was: "God be with you. Let us meet as little as we can!" And at a later stage of the story it is a mournful thing (which leads to much amusement) to learn that the clergyman greeted the bridal pair when they entered the church with the words "Abandon hope all ye who enter here!"

There are many other card games of this kind which can be bought ready printed, but a little ingenuity will soon show that they can be easily made at home with much variety, and can be exceedingly amusing.

Consequences.—Although this is a very old game, it never loses its attraction. Every player is provided with a pencil and a long slip of paper. The Master of the Ceremonies then instructs them to write on the paper the name of a man. This is done, the paper is folded down to hide what is written, and each slip is then passed along to the next person, who writes the name of a woman, folds it down, and again passes it on. This goes on until the following details have been provided in rotation: His name; her name; where they met; what he said to her; what she said to him; what the consequence was; what the world said. Of course these questions may be altered and added to at the pleasure of the Master of the Ceremonies. The papers are then unfolded and read out in turn, and very quaint are some of the tales thus concocted, for naturally all the players have done their best to make their part of it as ridiculous as possible. For instance, "His name was James, hers Ethelinda Marion Jane Dolabella Smith. They met in a salt mine. He said to her 'Have you seen the Shah?' She said to him 'Twas ever thus!' The consequence was they could not get a taxicab, and the world said 'These cases are so very sad, are they not?'" Sometimes the nonsense is exceedingly funny and remarkably apt.

Bouts Rimés.—Another writing game is Bouts Rimés, in which a line

of poetry is written, folded over, and the last word only written where the next player can see it, who must add another line rhyming.

Rhymes.—An excellent game is the old favourite in which each person writes a question on a slip of paper, folds it, and throws it into a hat or bowl. In another receptacle an equal number of slips of papers are collected, each bearing a noun written on it. Both sets are now thoroughly shaken up, each person draws a noun and a question and must, within some limited time, such as five or ten minutes, write a verse answering the question and introducing the noun. This is quite a quiet game. No one can be noisy whose mind is occupied with the awful necessity of writing a verse at short notice which shall perhaps introduce a word like "theologian" and also answer the question: "Why are pears not called apples?" But the silence thus engendered does not last long when the result is read out, which may read thus:—

"The theologian knits his brow,
For in his mind a question rears,
Why pears are not called apples, now?
They're up a tree it ap(ple)pears."

Blind Man's Buff.—The favourite games of action for small children are the old-fashioned Blind Man's Buff, Oranges and Lemons, Here we go round the Mulberry Bush, and so on. Blind Man's Buff is simple, noisy, and very exciting for all persons concerned. One player is blind-folded. It is then his business to catch somebody else. The sound of flying feet forms a sufficient clue when he is near anybody. He must then guess who it is he has caught. If he guesses rightly the captive becomes Blind Man. Until he does guess rightly he remains Blind Man himself, unless the Master of the Ceremonies arbitrarily deprives him of that office. It is sometimes a popular *rôle*, and Blind Man has been known deliberately to refrain from identifying his captive. There are other variants of Blind Man's Buff, for instance Silent Blind Man, in which the players must make no sound whatever but must change places every now and then, while Blind Man comes to them holding a long wooden spoon in each hand, with which he endeavours to trace the features of the silent figures. They must make no sound that would lead to their identification, but the fact that they can seldom refrain from doing so, by laughing, provides that Blind Man shall not be long in office.

Shadow Buff is a good game, too. A sheet or white curtain is stretched taut and Blind Man sits in front of it while the other players pass behind him, in front of the light, and he must guess whose shadow it is that is thrown on the curtain. Of course they may disguise themselves, short of entirely muffling their features; may walk lame, crinkle their noses, twist an antimacassar into a turban, and so forth.

General Post.—All the players choose a name of some town or city, save two, one of whom is blind-folded and the other acts as leader. The latter announces, for instance, that there is a post between Paris and

Timbuctoo, whereupon these two players must immediately change places, and Blind Man must try to catch one. At intervals the leader announces a General Post, in which everyone must change seats. Whoever is caught in either General or Particular Post becomes Blind Man.

Charades.—Charades are very entertaining. The party divides into two sections. One sits in the room, the other goes out and decides on some word which is easily divisible into two or more syllables, each having a meaning of its own. They then go in, announce how many syllables the word is in, and act a small impromptu scene in which the first syllable is introduced, another scene for the second syllable, and so on, and a final scene in which the whole word is mentioned. It is the business of the audience to guess the word. For instance, if this be "Courtship", the first scene can represent a monarch on a throne with his Court about him, and in the course of conversation the chamberlain may announce that a foreign potentate has arrived at the Court of the king, and he is ushered in with much ceremony. The second scene may be a wrecked party on a desert island, eagerly looking out for a passing vessel and discussing their chances of being rescued, with such ridiculous suggestion of the adventures they are having as is possible. Finally the look-out announces "A sail, a sail!" and amid great excitement the scene closes. Of course the word "ship" must be mentioned, but too much stress should not be laid upon it. The portrayal of the whole word "Courtship" will suggest itself to everyone. The treatment should always be amusing; the word should be a common one but not too obvious, and as a rule only substantives are allowed and plurals and proper names are barred.

Dumb Crambo.—This is the same game played entirely by signs. No words are spoken, but the action of the players must suggest the word or syllable they have in mind.

Living Wax-Works.—Acting games are always in favour, especially among girls, and Living Wax-Works is a very pretty specimen of these. The players are divided into two parties, of which one forms the other into groups representing some famous fairy tale, or some ordinary occupation of daily life, such as beating eggs, dancing, tying up the hair, &c. The leader of the game now goes to the piano, and with the first note the groups start into life. Red Riding Hood talks to the wolf, the Prince fits on Cinderella's slipper, the cook beats the eggs, and so on. The player must stop quite unexpectedly, and the groups must immediately become still, no matter what their attitude. The stage-managing portion of the party must make a note of all who do not, who afterwards have to pay forfeits. The wild efforts of Cinderella to stand on one leg, while the Prince remains rigid in the very act of fitting the glass slipper on to the other foot, may be imagined; and there are moments in the tying of a bow on one's hair when it is uncommonly difficult to keep the same attitude until the player starts the music again and releases one. The cessation of action must be absolutely coincident with the cessation of the

music. If the characters are dressed up a little, this is not only an amusing and interesting game, but a pretty one.

Who am I?—This is a good game for grown-ups. Each person has a label pinned on his or her back by the Leader of the Ceremonies, bearing the name of a well-known character. It is now their business to discover what this name is by asking of the other players such questions as "Am I alive?" "Am I a man or a woman?" &c., and of course the others, while sticking to the truth, must try and make the answers as puzzling as possible. This is only a variant of the many games in which one person goes out of the room, and must, by questions, on his return, try to discover what object has been thought of by those who remained in consultation in the room.

Forfeits.—Very many games are really only means of collecting forfeits, which are sometimes pretty, and sometimes amusing. They are also, in the cases of grown-ups, liable to be embarrassing, and some care should be taken where there are players elder than their early teens. Kissing forfeits, for instance, should not be exacted. Here are a few:—

To laugh in one corner, cry in another, and sing in a third.

To stand in the middle of the room, and first make a very woeful face, then a very merry one; if it be in the evening a lamp must be held in the hand.

To perform the laughing gamut, without pause or mistake, thus:—

		ha		
	ha		ha	
	ha		ha	
	ha		ha	
	ha		ha	
	ha		ha	
	ha		ha	
	ha		ha	
ha				ha

Rub one hand on your forehead at the same time you strike the other on your heart, without changing the motion of either for an instant.

Two may pay forfeits together in this way: They stand in separate corners of the room; one begins to walk towards the other, with handkerchief pressed to the eyes, saying in a dismal tone: "The king of Morocco is dead!" The other, passing by, in the same attitude, sobs out: "Sad news! sad news!" Again passing in the same way, they both repeat: "Alas! alas!" This must be done without laughing.

To keep silence and preserve a sober face for two, or five, minutes, whatever is said or done by your companions.

To stand up in a chair and make whatever motions or grimaces you are ordered, without laughing.

Kiss your shadow in every corner of the room, without laughing.

Repeat, without mistake, any difficult sentence which your companions appoint. For instance:

PETER PIPER.

Peter Piper picked a peck of pickled peppers;
 A peck of pickled peppers Peter Piper picked
 If Peter Piper picked a peck of pickled peppers,
 Where is the peck of pickled peppers Peter Piper picked?

THE TWISTER TWISTING.

When a twister twisting would twist him a twist,
 For twisting his twist three twists he will twist,
 But if one of his twists untwists from the twist,
 The twist untwisting untwists the twist.

ROBERT ROWLEY.

Robert Rowley rolled a round roll round;
 A round roll Robert Rowley rolled round;
 Where rolled the round roll Robert Rowley rolled?

"She was a thistle sifter; she had a sieve of sifted thistles and a sieve of unsifted thistles. She was a thistle sifter." Or "She sells sea-shells" several times over, or "Three gray geese on three green ridges, gray were the geese, and green were the ridges."

Make two lines of rhyme; or, if one line be given, find a rhyme to it.

Say five flattering things to the one who sits next to you, without making use of the letter L.

The one who is to pay a forfeit, stands face to the wall; one behind makes signs suitable to a kiss, a pinch, and a box on the ear, and asks whether he or she chooses the first, the second, or the third; whichever it happens to be is given.

Imitate, without laughing, such animals as your companions name.

Laugh at the wittiest, bow to the prettiest, and kiss the one you love best.

A long, but amusing, forfeit is to impose the task of saying the whole, or half, the alphabet through in "I love my love with an A because he is amiable, I love my love with a B because he is beautiful," and so forth.

Another funny forfeit ordains that the player shall go to each person present and say: "What did you see yesterday?" and whatever they may say they saw, he or she must answer very sorrowfully: "It was I." It is sometimes difficult to assert in succession, without a smile, that the broken-down motor 'bus, the red-coated monkey, the district messenger boy, and so forth, seen by the other players, were all different aspects of one's own personality.

EDUCATION.

I. EDUCATION OF BOYS

From various causes the importance of education, always great, has increased very much during the past century, and will probably continue to increase in the future. In the first place, education has been undergoing a reformation the effect of which has been to make it more adaptable to each individual's tastes and capacities and more serviceable to his after-career. Again, the advance of all kinds of scientific knowledge of moment in the different professions has made less and less adequate the knowledge derived from personal experience alone. The growing intricacy, too, and complication of the conditions of modern life, render most valuable a preliminary study of them under competent masters. Finally, the severe competition of rival firms and companies, which makes it so essential to them to obtain efficient servants, the practice of advertising situations, the allotting of posts in the public service by competitive examination, and many other features of modern life, are all tending to increase the importance of capacity as compared with interest and influence, and hence also of whatever will improve or strengthen capacity, and above all, of education. At the outset the quality and success of the previous education must often be the only test of capacity—and this point will not be lost sight of by those aware of the importance and advantages of a good beginning.

It may be well, before proceeding to more particular matters, to lay down some general rules with regard to education which should constantly be kept in view, though, of course, in exceptional cases it may be advisable to depart from them. In the first place, a cheap education is generally a very poor economy. This does not mean that an elaborate and expensive education is best for everyone, but that generally, so far as funds and circumstances allow, each one should be given the best education for which he is fitted, because the difference in the advantages between that and something inferior but cheaper usually greatly transcends the difference in expense. Again, it may be laid down that, as a rule, the greater the boy's ability, the longer and more costly will a suitable education be, for the longer and more difficult training required in those who are qualified to fill the higher stations in life more than counterbalances their superiority in intelligence. It is, however, to be borne in mind that the scholarships and other prizes open to competition at all high-class educational institu-

tions place the best education within the reach of many exceptionally clever boys. Thus those who commence their education at an elementary school sometimes conclude by obtaining the highest distinctions at the universities; while all who are appreciably above the average in intelligence may now hope to obtain an education which, except for scholarships and similar aids, would perhaps be quite beyond their means.

The Choice of a School.—At every stage of education, from preparatory to final, there will be many institutions offering to give the sort of instruction required. The choice, when so many colleges and universities set before themselves different objects, is a very serious matter.

Attention must, of course, be paid to the healthiness of the climate and situation, the extent of the accommodation, the capacities and number of the teaching staff, the number of boys in each class, the length of school hours (more likely to be too long than too short), the amount and character of the recreation, and the general system, arrangements, and discipline. Successes at public examinations, though among the best indications that can usually be obtained of the teaching efficiency of a school, are not to be relied upon absolutely, since it is possible to show up well in examinations by a system of forced work which obtains immediate successes at the cost perhaps of permanent injury, and also by special coaching of the cleverer boys to the neglect of the rest.

In the schools where there are classes in connection with the Board of Education the obtaining of the grants offered by that department may be accepted as a tolerable guarantee of efficiency, at all events in the subjects supervised. Examinations held by the City and Guilds of London Institute and other institutions of repute also supply a good test.

Every school develops a character of its own, and influences in certain specific ways those who are sent to it; and though this character and these influences are liable to vary greatly, they always differentiate any one school from any other, and make it in a greater or less degree peculiar and *sui generis*. This is a matter often of some importance, as the school which in these respects suits one boy may be unsuitable to another.

Scholarships.—Mention has already been made of the great advantages of scholarships, especially in the case of clever boys to whom their parents would not be able, apart from this assistance, to give an education suited to their capacities. Where there appears to be any prospect of a boy's winning such emoluments, it is always advisable, before finally selecting a school, to obtain all available information concerning the number and value of the scholarships tenable at the school and upon leaving it, and the conditions under which they may be won and held, and also the number of students usually competing for them.

Obtaining Information.—Upon all these points, especially perhaps upon the question of expenses, trustworthy information is often hard to obtain. Prospectuses may as well be asked for, but after all they are in a great measure merely advertisements, and are often most informing not in what they say but in what they leave unsaid. If, for instance, no mention

is made in a prospectus of commercial subjects, one may generally infer that such subjects are not taught at the school. On the other hand, parents should not allow themselves to be influenced merely by a very full and varied curriculum. In a school, especially a school for young pupils, it is not possible to teach many subjects well and thoroughly. A mastery of a few subjects is better than a smattering of many.

If the quality of the teaching is to be judged, as to a great extent it ought to be judged, by any degrees, diplomas, or certificates which the teachers may possess, care should be taken that the real worth and significance of these things are understood. There is, for instance, a wide difference between the ordinary Oxford or Cambridge M.A. and the London M.A. in favour of the latter, or between high honours in the final examinations of Oxford or Cambridge and in any of the London examinations in favour of the former. Certain foreign and American degrees are worthless, and in many instances simply fraudulent. Information from those well versed in these matters is likely, therefore, to be very useful.

There are defects from which no class of school can claim complete immunity. Every school has its ups and downs, its periods of vigour and depression, depending less upon its system and traditions than upon the capacity of those in control of it. Moreover, the tone and character of a school are constantly liable to change; abuses often of a serious nature creep in unnoticed, or, worse still, perhaps unheeded, and may work mischief before they are finally grappled with and eradicated. The present condition, therefore, and not merely the traditional reputation, of a school, is a matter requiring all the careful investigation that is possible.

Information upon various points, such as the terms of admission to the school, the endowments or grants from Government, from learned societies, or guilds, the number of scholarships and terms of competition, may be obtained by applying to the school authorities, generally to the secretary or headmaster, or by consulting the latest editions of such works as the *Public School Year Book*, and very often the local directories.

VARIOUS KINDS OF SCHOOLS.

Day and Boarding Schools.—In England a great number of the large schools belong to the class of boarding schools, though they generally make provision for day scholars also. In Scotland, on the other hand, the day-school system is almost universal, except in private schools.

Many parents show a disposition to hurry off their children to boarding schools at the earliest moment possible. This is often a mistake. The children are thus estranged from home at a time when its influence is of great moment. Moreover, it is generally far more in the power of parents to make their children's education successful in the case of day than in that of boarding schools by judicious supervision and some—but

not too much—assistance in home lessons. A child's health can also be watched over more satisfactorily when he is at a day school, a parent's eye being more likely to detect anything wrong than a stranger's.

Private Tuition.—Education by a private tutor, whether at home or with a few other boys at the tutor's residence, may be advisable in exceptional cases, as of weak health and backwardness, and for short periods, as during preparation for some public examination. Otherwise it is not to be recommended, for it misses all the advantages attaching to school-life arising out of the meeting with others of the same age, and the competition and co-operation with them in games and studies. In private tuition, no doubt, the individual tastes and requirements can be more closely attended to, but the tutors themselves are generally of inferior attainments to the masters at a good school. It may be worth mentioning here that private tuition and special individual attention can be obtained in many schools.

Public Schools.—In England the so-called "public schools" have the first rank. Though the name is used rather loosely, and not always with the same meaning, it may to some extent be defined as an endowed secondary school or college for the sons of persons of the wealthier classes, giving a fitting education to the pupils for entering the universities or engaging in active life. Some of them are designated "colleges". One of the most conspicuous positive characteristics of a public school is its high social rank. This, combined with the organization and regime characteristic of boarding schools in this country, but most thoroughly developed in the public schools, has given education there a peculiar and special character which leaves its stamp on most of those who are brought under its influence. Though, as a rule, primarily boarding establishments, most of the public schools admit day boarders and day students.

The public-school system prevails to a far greater extent in England than in either Scotland or Ireland, if, indeed, it can be said to prevail in the last-mentioned country at all. The English public schools are, however, to some extent recruited from both the other countries.

For boarders the total annual charge, exclusive of optional extras, in the higher forms of public schools, varies from about £130 to less than half that amount; in the lower and preparatory forms it will usually be a few pounds less. For day boys the tuition fees range between about £40 and £2, 15s., and there are also distinct charges for day boarders. These sums do not, of course, cover personal expenses, but merely those payable to the school. Scholarships tenable at the different schools range in value from about £90 a year to almost nothing, and in the same school they often differ very greatly in value. The most valuable leaving scholarships are worth £80 a year, tenable only at certain institutions, usually the universities of Oxford and Cambridge. Certain scholarships are sometimes reserved to boarders.

Grammar Schools.—The teaching system of grammar schools resembles that of the public schools; the masters are mostly old public

schoolmen. The general character and organization, however, differ in important respects, the social rank being usually lower and day students predominating. A feature of grammar schools is the number of free-education scholarships, many of them reserved to students from the public elementary schools. There are also other scholarships either at the school or at the university. Many of the old grammar schools have been re-organized in modern times so as to adapt them to present-day conditions.

Christ's Hospital.—A school perhaps sufficiently unique to deserve separate mention is Christ's Hospital (the Bluecoat School). Education, food, and clothing are either wholly or in a large measure gratuitous. Students are admitted by nomination and competition. Nomination is in the power of the bodies directing and supporting the institution. Children whose parents have rendered considerable public service, or have been otherwise eminent, are considered to have a special claim for admission. Certain public elementary and endowed schools have also the privilege of nominating competitors. There are, of course, limitations of age. No children are admitted whose parents do not appear to the authorities to be in need of such assistance, and even when admission has been granted the parents or guardians may be called upon to pay something towards maintenance.

Mixed Schools.—According to a recent report published by the Education Department regarding the secondary schools of England, out of about 140,000 boys receiving education at these schools more than 20,000 were at "mixed" schools for both boys and girls. In some of these the boys and girls, though in the same building, were taught separately, in others together. Girls' schools at which there were a few little boys were not reckoned as mixed schools.

Private Schools.—It will also, perhaps, be worth while to consider briefly the position and character of private schools, *i.e.* schools kept by private persons for their own profit. As a class they have made a great advance in recent years, and are generally in a fairly good condition. Nevertheless, there are still some which are far from satisfactory, usually schools in a low condition financially. The managers of these small struggling schools are often men of no particular qualifications, and hence their system and methods are not likely to be very intelligent or judicious.

These are drawbacks which some will consider to be compensated by the cheapness of the education given in such establishments. Cheapness is, however, in most cases an advantage only when nothing better can be afforded, and as scholarships are seldom, if ever, offered at these schools, even their cheapness is more apparent than real in the case of a clever boy.

It is possible that owing to the changes in the educational system of the country, which have been or are being introduced, many of these unsatisfactory schools will die out. These changes include the regulation and organization of the teaching profession somewhat after the fashion of the legal and medical professions, and the creation of the Board of Education and of the local bodies that control education throughout the country.

Other Schools.—There are other schools which cannot be included in any of the last five classes. Many of these schools are excellent, and the fact that they have not as a body sufficiently definite characteristics to render a brief general treatment of them in any way serviceable should not cause them to be lost sight of. To some persons certain of these schools will be especially useful. Thus some of them have been founded mainly for the benefit of certain classes, or of persons placed in certain circumstances, or are controlled by bodies such as municipalities, city guilds, &c.

Schools for the Abnormal and Defective.—A prodigious advance has been made during recent years in the education of the blind and the deaf and dumb, and the opportunities are increasing of obtaining for them not only a sound and appropriate education but, where this appears suitable, an education of the highest kind. A similar change has taken place in respect of the feeble-minded, the crippled, the epileptic, and those otherwise defective. The work is carried on partly by local education authorities, partly by private bodies. According to a recent Report of the Board of Education—"in schools for afflicted children it is always a primary object to secure a curriculum which shall tell most effectively on the prospects of the child when school age expires, otherwise, in the existing stress of labour conditions, the deaf and the blind are apt to fall very quickly out of the race". Some institutions lay themselves out exclusively to provide a technical training for pupils over the age of sixteen, being in this supported by local authorities. A number of "after-care" committees have also been established, their special purpose being the obtaining of work, further education, and apprenticeship for children reaching the limit of elementary school age. It has been found that day-schools and small schools for afflicted children are less successful than large and residential schools, and the latter are taking the place of the former so far as this is practicable, so as to bring the children for a much greater part of their time under the teacher's influence. School authorities can convey such children to special institutions at the expense of the rates, when their parents are unable to afford this.

Public Education in England and Wales.—The age of compulsory attendance in the elementary schools is from five to fourteen years, but the period may be shortened considerably, provided that a certain proficiency has been attained.

There are seven classes or standards. Education is principally confined to the usual elementary subjects, but in the higher standards it becomes of more advanced quality, and is varied to suit differences of taste and aptitude. Attendance in the last two standards, in which new subjects are introduced, is not usually obligatory.

In the "higher grade" elementary schools education is longer in duration and more advanced in character. They have been called into existence to meet the demand that higher education should be available for all sections of the population, and their number is not very great. The same demand, however, has led to the establishment of many public secondary

schools, and now there are more than 700 such schools receiving Government funds and having a four years' course, beginning at twelve years of age and upwards.

Bursaries are commonly given by local educational authorities to enable pupils to prolong their studies beyond the usual school age.

Public Education in Scotland.—The Scottish system of public education differs in some respects from the English, besides being much older. The origin of Scottish primary and secondary education is traceable to the parochial schools founded three centuries since. The schools grew up under the guidance and protection of the Scottish Church, and every parish in the country had to have its own public school. The schools of Scotland, parish and other, were latterly found to be inadequate to the needs of the country, and a new system, under which every parish was placed in regard to education under a school board, was introduced in 1872. The new structure was built largely upon the old foundations, and thus public education in Scotland was more thoroughly a national system than in England, and the powers and authority of the School Boards more extensive. All primary and secondary or burgh schools existing at the time when the school boards were established passed under their control, and they were further empowered to erect new schools where these appeared to the educational authorities to be required.

Public Education in Ireland.—In Ireland there are no local School Boards, but education both in the national and in the private schools availing themselves of the Government grant is under the supervision of the Commissioners of National Education, half of whom must be Protestants and half Roman Catholics.

PRIMARY AND SECONDARY EDUCATION.

The Three Stages of Education.—A complete education may be said to have three main stages—preparatory, intermediate, and final. The preparatory stage, extending to about the thirteenth or fourteenth year, is devoted principally to those elementary subjects, and elements of more advanced subjects, which are indispensable in almost every occupation in life. From another point of view, it may be regarded as providing the means to education rather than education itself in the truest sense of the term.

The intermediate stage, which at the longest is seldom prolonged beyond the age of nineteen, and in many cases should terminate much earlier, is usually the most purely educational. Its studies should be directed not so much to the storing of information as to the improvement and strengthening of the intellect. It is largely from a failure to appreciate that such is the true end of education at this stage that the outcry against the alleged inutility of much of the generally approved curriculum, and the

demand for something more practical, arises. Studies in themselves useless for practical objects often have an improving and disciplinary effect which renders the mind far more fit at a future period to grasp and make use of the special practical knowledge which will be required, while giving it a width and elasticity which will enable it to accommodate itself more easily to changes and revolutions should the advance of discovery or any other cause some day render any part of that special knowledge obsolete or useless.

Not that the objection has always been or even is now altogether without force. Until modern times the system of education which came into favour at the time of the Renaissance continued unchanged, notwithstanding the immense subsequent extension of the limits of knowledge. During a considerable period, however, the defect has been universally recognized, and there has been a general endeavour to remedy it. If reforms have, nevertheless, come rather slowly, it must be remembered that where much is still uncertain and matter of dispute, there is a considerable danger in precipitate action.

The final stage has to some extent the same object as the intermediate, but is more definite in its aim, which is usually the acquirement of professional skill and knowledge.

The chief distinguishing feature of what is known as primary education is the omission of the second stage. The different schemes of secondary education are roughly divided into third, second, and first grade, according as the second stage is calculated to conclude at about the ages of fourteen, sixteen, and eighteen.

Another distinction is concerned with the relation of the final education to the practical professional training or apprenticeship. In primary education these are generally taken simultaneously; in the highest grade of secondary education they are in point of time completely separated.

Primary education is given in the public elementary schools (excepting the higher grade and the other more advanced schools), and in some private schools.

Continuity of Education.—The proper adjustment of these three or two stages, as the case may be, is one of the subjects to which educational reformers have given attention during recent years, and much has been done in conformity with their proposals. While the evils of too early specialization are fully recognized, the principle adopted is to prepare the ground for the more special training to follow. Hence in the more advanced schools, and even in the more advanced classes of the public elementary schools, all the boys no longer go through the same course; they are divided into classes, and taught according to the profession which they are afterwards to follow. The new schemes endeavour to preserve the continuity of education, and to prevent the old awkward break between the second and final stages.

PREPARATORY EDUCATION.

Kindergarten.—It is the opinion of educationists that not very much real study should be done before the age of seven. Of the two mistakes of beginning too early and too late, the former is certainly the more serious. The backwardness which may at first result from a somewhat late commencement can be made good, and the mind will probably not take very great harm from a little unseasonable inactivity; any attempt to hasten its development prematurely may work irreparable mischief. If the Kindergarten system is used, an earlier start may be made than otherwise; in fact, that system in its completeness provides for instruction of a sort beginning at an age still reckoned by months. If a good school conducted on Kindergarten lines be available, it may with advantage be utilized. These schools are attended by children from three years of age or even less. The great object of the system is to educate the child without applying pressure, that is, not to set it to learn tasks, but to organize and direct its play so as to be instructive and improving, while none the less amusing.

Preparatory Schools.—Many secondary schools have preparatory forms or houses to which little boys are admitted, in some cases at the age of eight or seven. Some private schools prepare directly for particular public schools.

Though scholarships may not be offered at some school for the period of elementary education, eligibility to scholarships later may be conditional upon residence at the school during part at least of this earlier period. These are points worth ascertaining when any particular school is in view. But owing to the absence of this residence condition at some public schools, and to the especial need at this period of more individual attention, many persons prefer a good private school (in spite of the greater expense perhaps necessitated) for preparatory purposes. Some private schools have been decidedly successful in training for scholarships at the public schools.

Very many girls' schools take in boys also in the lower forms.

SECONDARY EDUCATION.

For convenience sake, the term "Secondary Education" in the present section will be confined to the second of the three stages described above.

Lines of Study.—General knowledge is necessary, though in different degrees; after it has been acquired, however, the paths begin to diverge. It is during the second of the three stages mentioned above that education becomes markedly differentiated. The alternative courses are not indeed many; at the very first there are usually only two—the so-called classical and modern courses. As has already been said, the formation of a special type of mind rather than the acquiring of knowledge likely to be directly useful is the proper aim of secondary education.

The determination of the line of study to be pursued at school ought, of course, to depend principally upon the career or profession to be adopted afterwards. The exact profession may not be known so early; in fact, any premature decision of this matter is usually to be deprecated; but the kind of profession will perhaps be known, and such knowledge should be quite sufficient for deciding which scheme of secondary education it will be best to adopt.

While some schools devote themselves exclusively to one branch of secondary education, and are simply classical schools, for instance, or commercial or army schools, there are others which have a duplicate or triplicate organization by means of which they are able to give separate attention to the different branches. A school which in this way makes provision both for those who desire a classical and for those who desire a commercial education is said to have both a classical and a commercial "side". Many of the old schools, which formerly gave an exclusively classical education, have reformed themselves in this direction.

It used to be urged against the schools with both classical and modern sides that, as all the more promising pupils were sent into the former, the latter lost in prestige and was looked down upon and neglected. This was natural enough in the case of the first hesitating and reluctant steps to meet a need which was still but imperfectly appreciated, but in later years the defect has generally been recognized and made good.

Duration of Secondary Education.—Not only the class of subjects to be learnt, but the time to be spent in learning each, must early be decided. Just as there are different systems of secondary education, so are there of classical or commercial secondary education: the distinction of first, second, and third grade secondary education has already been referred to. A boy who has received a course of secondary training intended to cease with the completion of his sixteenth year will not, when that time has arrived, find himself exactly similarly equipped to those who all along have purposed to spend, say, two more years over this stage and have received a course of instruction framed in accordance with this scheme. Hence, if it is now resolved to prolong his education, and if accordingly he is sent to work with them, he will be at considerable disadvantages; much that he knows will be useless, and much that is of importance he will not know.

The choice of a secondary school or of a secondary system of education should therefore depend largely upon the amount of time to be expended over it. While there are advantages in deciding these matters fairly early, the decision should not be hurried, and as far as possible every boy should first of all be given a fair chance of showing both the nature and the degree of his capacities. Further, in spite of the inconveniences and drawbacks involved in changing from one system of education to another—for instance, from classical to commercial, or from a lower to a higher commercial—yet in certain circumstances it will be advisable, as where capacities at first unnoticed have asserted themselves later, or where early promise has not been fulfilled.

Examinations.—It is for the most part during secondary education that preparation for public examination becomes an important feature of school-work. There are distinct advantages connected with the preparation for and the passing of these examinations. They afford a better motive to work than the rivalry for places and prizes, a motive too that will affect strongly a greater number of boys in each class. Again, these examinations often confer on those who pass them certain privileges and advantages in connection with the professional training to follow. To give a single instance, the Incorporated Law Society accept a first-class obtained in the matriculation examination of the London University in place of one year's service of articles.

Special reference must be made to the College of Preceptors' examinations, the university local examinations, and the London matriculation. Under certain easy conditions, these examinations may be held at the schools from which candidates are entering for them.

FINAL EDUCATION.

Classes of Professions.—Schooling ended, the choice of a career must be made with greater definiteness. It would not be in place here to attempt to lay down what considerations should have weight in that choice, nor to discuss the advantages and prospects of the different careers. For advice upon matters of this sort readers are referred to the article on the Choice of a Career. It will be sufficient to consider the subject only so far as concerns the training required, and that not with reference to each profession in turn, but broadly under the five general headings of *the public service, technology, commerce, learning, and art*. This is not intended as other than a very rough classification; it is not exhaustive, nor are the divisions mutually exclusive. For instance, the training requisite for those who wish to qualify for the public service might often quite appropriately be classed under one of the other heads. But though not very exact, the division will probably be found convenient. The first four classes will be taken in the order in which they are enumerated above; for artistic training, so far as it is not included under technology, see the section on the Choice of a Career.

THE PUBLIC SERVICE.

The usual way of entrance into the state service is by competitive examination. The competition is not unrestricted. Sometimes it is confined to nominated candidates, and always an age-limit and a health-test are imposed.

As a rule, neither expert knowledge nor experience is required of the candidates, preparation for the qualifying examination hardly if at all

demanding greater specialization than is provided in the ordinary primary or secondary education. In many schools there are special "sides" in which candidates for these Government examinations are prepared, and it is sought by adopting their methods to rival the efficiency of the "coaching" establishments. Preparation for the army and for the higher departments of the civil service is sometimes combined with a course at the universities, and in the former case an extension of the age-limit is allowed to graduates of certain universities. Nevertheless in the one purpose which they set before themselves, the success of their pupils at the examinations, the best of the "coaching" or "cramming" establishments probably still retain their lead, and even competitors who have had a distinguished university career sometimes find it to their advantage to conclude with a short term of study at a crammer's before entering for the examination.

At the same time there are certain disadvantages involved in spending any considerable time with a "crammer". Though the character and methods of cramming have improved in conformity with improvement in the character of the examinations, the rather narrow purpose to which it is addressed exclusively cannot but affect pupils unfavourably.

A number of coaching institutions devote themselves to preparing candidates for the lower branches of the service at moderate charges. Thus, a college which coaches by correspondence for some of these departments offers courses of from twelve to twenty-four weeks at costs varying from about 2s. to 4s. a week, and "till successful" courses for about double the charge of the twenty-four weeks' course.

TECHNICAL EDUCATION.

Importance of Special Training.—Technical training in its widest signification includes not merely training for those professions which require a special scientific knowledge, but also for the handicrafts and for the fine arts in their lower uses and applications, where a mastery of technique rather than any great depth or power of expression is required.

The importance of a firm grasp of scientific principles in many branches of productive industry was sooner recognized in some of the Continental countries than in Britain, but during the past half-century it has become generally recognized here also, and efforts have been made to recover the lost ground. Hence no other branch of education has made so great an advance during the past twenty or thirty years as regards both the quality of the instruction and the number of places where it is given. Endowed colleges and schools have risen up all over the country. Of late years, too, the State has rendered effective help in the same cause. The County Councils have at their disposal an annual sum, any part or all of which they may devote to the advancement of technical education; and

besides what they draw from the State, grants from the rates may be made for the same purpose. The Board of Education exercises a special supervision over technical education, and is in direct connection with a great number of science and art schools and institutions of an elementary and advanced character, and of others which, while not devoted exclusively to technical instruction, have special classes in which it is taught. The Board holds annual examinations at these institutions, and upon the results allows grants in aid when proficiency has been shown, also giving prizes and scholarships to the most successful students to enable them to continue their studies at the more advanced schools under the direct control of the Board, such as the Royal Colleges of Science and Art, South Kensington.

The importance of a good special training for the technical professions, especially in their higher branches, is very great. The man who in his youth came to London with a shilling in his pocket and ended his career fifty years later as millionaire and ex-Lord Mayor, is not, perhaps, an infrequent character in commercial life, though even there a good education has its value; but parallel examples in the more advanced of the technical professions are very rare. Stephenson, it is true, was self-educated, but Stephenson was one in a million, or rather in many millions.

Training for Handicrafts.—At the same time, an elaborate training would be entirely wasted upon such as are not mentally fitted ever to occupy any posts but the lower. Professor Huxley recommended that those intending to be handicraftsmen should be sent to the workshop at thirteen, obtaining by means of the evening classes established throughout the country whatever further instruction they might require. The time given exclusively to education would thus be cut short at the conclusion of the primary stage. Moreover, both the practical and the theoretical training would be taken simultaneously, and not successively, as in the preparation for the higher branches. Usually the greater part of the day is spent at the workshop in learning the trade, and only the evening is available for such further instruction as is required. This instruction may sometimes be obtainable at the workshop, but more commonly it must be sought elsewhere. Most of the larger educational institutions devoted either wholly or in part to technical education, and also some of the universities and colleges for advanced study, have evening classes of the sort. In addition, the County Councils and municipal and local authorities have expended in this way some of the means at their disposal. In Ireland similar assistance has been given by the Department of Agriculture and Technical Instruction. Schools and classes privately and locally organized are also in existence in many places, and though as a rule the training which they provide will not be comparable in efficiency with that given at the largest institutions, they may be utilized in places where the latter do not exist.

Side by side with the elementary technical classes there are frequently others of a more advanced character for such as have been precluded by want of means and opportunities from obtaining in earlier life an education

really worthy of their talents. To take a definite instance: at a technical institute, of which further mention will be made later, there are evening courses for handicraftsmen and others engaged in practical work during the day who desire to obtain a knowledge of scientific principles. They are either apprentices or persons who hope to obtain a higher professional position requiring a greater command of scientific theory. The evening courses continue during two-thirds of the year, students attending from three to five nights in the week as the case may be. The fees vary from a few shillings to over a pound, but apprentices under twenty are admitted at half price.

It may be worth while repeating here that a certain amount of technical instruction is given in the elementary, higher grade, science, and evening continuation schools established in many of the larger towns, and proficiency in technical as in other subjects may bring scholarships or exhibitions (*e.g.* those offered by the Science and Art Department) and the means of more advanced education.

Higher Technical Education.—For those who aspire to a higher position in the technical professions than that of handicraftsmen, some further general education will be necessary. This subject has already been treated in the previous sections, especially in that on "Secondary Education", and there would be no advantage in repeating here with special reference to technical instruction what was there stated generally. Beyond secondary education, there remains the final stage in which the special professional skill and knowledge are acquired. The age at which this final stage is entered upon will usually be determined by the position which the student hopes to occupy in the profession. The higher that position, the longer will the special and exclusive training for it usually require to be. Broadly, however, it may be said that technical education in the day classes of the principal institutes is intended for those who wish to qualify themselves for important posts in factories and large business firms. The course of training should last for one, two, or three years, according to requirements.

A very brief account of the scheme and cost of instruction at one of the most typical institutions preparing for technical work in all its branches may be found useful.

The most advanced course lasts for three years; students must pass an entrance examination and have completed their sixteenth year. During the first year all the students work together, but as the instruction becomes more specialized, they separate into different classes. The fees for instruction are £25 a year; if this sum seems high, the institution in question, it may be mentioned, though one of the best, is also one of the most expensive. Students are not boarded, and, therefore, those coming from a distance must obtain lodgings somewhere near at hand. There are a number of scholarships and prizes awarded upon entrance, some open to candidates under twenty-one years, others reserved for particular colleges. The most valuable of the open scholarships is

awarded for two years in the first instance, and renewable for a third. Certain other prizes are open to competition during the course or upon its completion. The most valuable are two fellowships of not more than £150 each, but these are also open to certain outside competitors. It is also possible to take portions of the three-year course, the fees being in that case proportionately higher. Fellowships, diplomas, and certificates are granted according to the proficiency shown at the concluding examinations by those who have followed the whole course.

Another course, not quite so advanced, is for one, two, or three years; there is an entrance examination, and no one under fourteen is admitted; fees are £15 a year, with some light extras. There are some scholarships open to candidates from certain schools. Certificates are awarded to those who satisfy in the final examinations. Students can pass on to the higher course just described, commencing either in the first or second year of it. There are certain scholarships open to those who propose to do this. Portions of the course can also be followed.

Different institutions have different rules, and employ different methods; there are, in fact, other schools belonging to the institute just described, the work of which is conducted upon somewhat different lines. Still, what has been said may be useful as an illustration.

Technical education (including evening courses for those at work during the day) is provided at some of the universities and advanced colleges.

COMMERCIAL EDUCATION.

Training for Clerkships.—Clerks, like handicraftsmen, must commence their apprenticeship at an early age—between fourteen and fifteen is perhaps the best—and should supplement the practical experience thus obtained by attending evening classes. What has already been said in the section on Technical Education with reference to these classes will apply here also.

Higher Commercial Education.—It cannot be said that commercial education in this country for the higher grades is in a perfectly satisfactory condition, but there has been a great awakening during very recent years with regard to this matter, and it is not improbable that the next few years may witness a considerable advance beyond what has already been achieved. A scheme of commercial education drawn up by the London Chamber of Commerce has been for some time in successful operation, and several metropolitan schools and institutions for advanced secondary or for final education have arranged courses of study in accordance with it.

The Victoria University of Manchester and Birmingham University both grant degrees for commercial knowledge, and there are a number of public examinations which may be useful. Thus the examinations of the

College of Preceptors may be passed in commercial subjects. The Universities of Oxford and Cambridge also hold commercial examinations intended to have a similar position in commercial education to that of the local examinations in classical education. The examinations of the London Chamber of Commerce have a very definite value, since a large number of firms have agreed to give a preference to successful candidates in filling up clerkships.

Commercial education, however, cannot be considered to have received adequate attention until provision has been made for it at all the principal seats of learning, or until, as in Germany, special institutions for students intending to enter on a commercial career have been established in the chief cities. Besides the Universities of Birmingham and Manchester (at which latter commercial studies are encouraged by valuable scholarships) the London School of Economics, connected with London University, is one of the few institutions at which an education is given worthy of those who are to be the leaders of commerce in this country and the shapers of its commercial policy and destiny.

EDUCATION FOR THE LEARNED PROFESSIONS.

The term "learned" may be taken to embrace all those professions in which a very considerable amount of theoretical or scientific or book knowledge is required. In this sense it includes the higher branches of technology and of most other professions which in their different branches require very different degrees of skill and knowledge, and their claim to be so far acknowledged and treated as learned is now being generally admitted. At the ancient Universities of Oxford and Cambridge some attention is now given to such subjects as agriculture and engineering, but the older institutions have been less ready to admit the importance of such practical subjects than most of the newer universities, though it is not unlikely that before long they will give extended attention to these matters.

For the profession of teaching in its higher branches a course of study at one of the universities or advanced colleges is essential; and even for learned professions of a more practical character, such a course is often followed, though it usually involves the lengthening of the period of education beyond what would otherwise be necessary.

Detached Colleges.—There are advanced colleges established in many parts of the country, some of which, such as the theological colleges, confine themselves to preparing for a single profession. Others are established on a wider basis. They usually grant to successful students diplomas, associateships, and similar honours which carry with them a recognized value, and their course of studies is often drawn up with reference to the examinations of certain of the universities. Some of

these colleges are specially connected with certain universities in various ways, one of the most common being affiliation, which enables students at the affiliated colleges to shorten the time of university residence.

The following list of institutions belonging to the class of detached colleges may be useful:—**ENGLAND AND WALES**—University College, Bristol; University College, Nottingham (affiliated to the Universities of Oxford and Cambridge); St. David's College, Lampeter (empowered to confer the degrees of B.A. and B.D., and affiliated to the Universities of Oxford and Cambridge); Hartley University College, Southampton; Royal Albert Memorial College, Exeter; and University College, Reading (established in connection with the University Extension Movement). **IRELAND**—The Queen's Colleges at Belfast, Cork, and Galway, and a new college at Dublin, in connection with the two new universities at Dublin and Belfast established by the Act of 1908.

Further information may be obtained from works on education, and by application to the colleges for prospectuses of their work.

University Education.—The universities may be divided into three classes—examining, teaching, and residential. Certain universities, however, may be placed in more than one of these classes.

Some of the colleges belonging to the newer universities will send prospectuses upon application. Information of an official nature can also be obtained from the calendars published by most universities, the official gazettes, such as the *Oxford University Gazette* and the *Cambridge University Record*, and the "University Intelligence" column in the daily papers.

Examining Universities.—An examining university is one that merely examines and confers degrees and other distinctions. The most celebrated is London University, which was long only an examining and degree-conferring institution, but is now both a teaching and an examining university. The examinations of this class of university are especially useful to the advanced colleges considered in the previous section. The London matriculation examination is also popular with many secondary schools; candidates for it must not be less than sixteen years old. The examinations of these universities may also, of course, be prepared for by private tuition, but a more economical plan is to join a correspondence class in connection with some institution making a special aim of preparing pupils for the examination which it is desired to pass.

Teaching Universities.—In the teaching universities, only those candidates are admitted to the examinations for degrees who have followed the course of instruction given by the official teachers and lecturers. This, of course, usually necessitates residence during term in the university town. At the Scottish universities, which are all of this kind, the fees and cost of living are so low that the sons of persons in humble circumstances are often educated there. The length of residence necessary for a degree is at least three years, and may be considerably longer according to the nature and extent of the work taken up. There

are bursaries obtainable by students entering, while prizes and fellowships, in value from £10 to £160 or more a year, are also open to competition. Graduates of Scottish universities not infrequently proceed to Oxford or Cambridge, where the average age of the students is higher.

A more modern type of the teaching university is represented by those universities the constituent colleges of which are in different parts of the country. The students live either in lodgings or in halls of residence. These colleges have an advantage over the detached colleges described in a previous section, and, in a less marked degree, over those colleges which have established a certain connection with a particular university without becoming an integral part of it; for as the university examinations are framed exclusively according to the requirements of the colleges, the scheme of work in the colleges can be arranged simply according to what appears best, and not with reference to the regulations of a foreign body which has to make provision for other interests as well.

The teaching universities of the United Kingdom are: In England and Wales, London University—this and the colleges connected with it are dealt with in a later section; University of Manchester (Victoria University); University of Liverpool; University of Leeds; University of Sheffield; Durham University (belonging to which are the Colleges of Medicine and of Science—Armstrong College—at Newcastle-on-Tyne); Birmingham University (for which Mason University College formed the basis); the University of Wales (constituent colleges—the University Colleges of N. Wales at Bangor, of S. Wales at Cardiff, and of Wales at Aberystwyth); in Scotland, St. Andrews (of which University College, Dundee, forms a part), Glasgow, Aberdeen, and Edinburgh Universities; in Ireland, the Catholic University (constituent colleges—Maynooth, Dublin, Blackrock, Carlow, and Clonliffe), and the new universities at Dublin and Belfast, with colleges at Belfast, Dublin, Cork, and Galway.

Residential Universities.—The name residential which is here given to the third class of universities may be open to objection on the ground that the teaching universities virtually if not expressly require residence in the town where the university itself or some constituent college is situated. But any alternative name, collegiate, for instance, would be open to similar objections. The chief distinguishing feature of these universities is that the great majority of the students reside during at least a portion of their academical career in the colleges of the university, whereby closer relations are established both between students and tutors and between the students themselves, the effect being to quicken the social life and the general intellectual interest as distinguished from the interest of each one in his own special work. It is true that there are halls of residence in connection with some of the teaching universities, yet they have not the same potent influences as has the collegiate system in its full development. It is this system which makes the residential universities pre-eminently places of culture, and further, they differ from other

universities in that they are not exclusively educational institutions, for they offer many social advantages as well. The residential universities of Oxford and Cambridge, while possessing some unique features of ancient origin, have not been unmindful of modern progress, and there are now a great number of alternative courses of studies or "schools" for which they make provision, in this resembling London University.

The general advantages peculiar to a residential university, though not without a pecuniary value, will most strongly attract those persons to whom pecuniary considerations are not of the first importance. Another great advantage, however, lies in the excellence of the education at the principal of these universities, Oxford, Cambridge, and Trinity College, Dublin. At the same time the expenses are heavy. Though the tuition fees may not amount to more than at some of the other colleges and universities, the general cost of living is usually decidedly higher—seldom, except in the case of the comparatively few non-collegiate students, below £170 a year at Oxford, £150 at Cambridge, for the three or four years covered by a complete university career. At the same time it must be remembered that for the capable and industrious there is always the chance of valuable scholarships and similar prizes. It does indeed occasionally happen that the money thus won not only covers all the expenses incurred but gives a considerable balance besides. As has already been mentioned, many schools offer a few scholarships tenable by those going on to the university during residence there. Scholarships at the different colleges of the University are either "close", *i.e.* reserved to candidates coming from certain schools or having certain other qualifications, or "open" to all competitors under nineteen years of age. The usual value of these scholarships is £80 a year, and of exhibitions, which are competed for in the same way except that there is no age limit, £50 to £30. They are generally given for two years in the first instance, but are renewed at the expiration of that time unless the work has been unsatisfactory. Of the other prizes to be won at the university by far the most important are the few prize-fellowships worth £200 a year for seven years, and involving no duties to hinder or retard the professional work of those obtaining them.

The Universities of Oxford, Cambridge, Durham (in part), and Dublin (Trinity College) are residential in the sense of the present section.

FOREIGN EDUCATION.

A rule which admits of few exceptions is that the earlier part of education is better obtained at home than abroad. All studies are more effectually prosecuted in one's own than in a foreign tongue. Further, a perfect command of that tongue and a thorough knowledge of the character and training in the ways of one's countrymen, if not acquired

through habitual intercourse with them in early life, may never be acquired afterwards. It must be remembered, too, that even though in certain subjects instruction in itself superior may be obtainable abroad, yet its superiority may be more than counterbalanced by its frequent unsuitability to conditions in this country.

Though education abroad, therefore, is not usually advisable, yet for certain subjects it may sometimes be recommended. Thus it may be that the ampler and more satisfactory character as well as the cheapness of the German commercial education in its highest branches would justify an Englishman in preferring it to anything that can at present be obtained in this country. Higher artistic education is also generally found to be cheaper in those Continental countries where the arts are more cultivated than in Great Britain. The fact has also to be remembered, that living is usually much cheaper abroad, and especially so perhaps in foreign seats of learning.

There are certain scholarships intended for students proceeding to some foreign colleges and universities. Special reports on foreign and colonial education have been prepared by the Board of Education.

SUPPLEMENTARY EDUCATION.

There are many persons who, while engaged in earning their livelihood, like to occupy their hours of leisure in increasing the knowledge and skill acquired during their general or professional education. There are several ways in which such a desire for further education can be satisfied. The subject has already been treated to some extent in the sections upon technical and commercial education. Some of the schemes mentioned there cover a wider range of subjects than it was then necessary to consider. A few words concerning these, and certain others which have met with considerable success, may be found useful.

Evening Schools.—Evening Schools and Continuation Classes, intended primarily as a means of continuing the general education of those who have been obliged from an early age to give the daytime to earning their living, have long formed part of our educational machinery, especially in large towns. Education given in this way has assumed large dimensions under the fostering care of the educational authorities; boys and men, girls and women, in all about 700,000, being in attendance, and numerous subjects being taught, including agriculture, horticulture, elementary science, &c.

Most of the larger educational institutes which have organized evening technical classes have also added classes in other subjects, such as history, literature, and languages, and those who like to have a concrete and definite aim before them in their work may thus prepare for such examinations as those of the College of Preceptors, or of the London University, or for the local examinations held throughout the country by several of the

universities. The higher locals (to be distinguished from the senior locals) are especially convenient, as they can be taken up in parts year by year.

Information respecting any university examination may generally be obtained by application to the Secretary. The Registrar of London University should be applied to at London University, South Kensington, S.W., and the Secretary of the College of Preceptors at Bloomsbury Square, London, W.C.

Here we may also mention those institutions which aim at combining education not only with profitable work but also with profitable amusement. Such are, for instance, Mechanics' Institutes, Athenæums, Polytechnics, and other establishments of similar character. While some make provision for the same classes as the Mechanics' Institutes, others appeal to persons of higher social standing. The best of these institutions provide many of the accessories of a good club, besides laboratories, studios, library, and accommodation for the meetings of debating and other societies, and for entertainments and lectures of general interest. The annual fee does not exceed more than a few shillings.

University Correspondence.—The University Correspondence Classes answer largely to the same demand. There are a number of tutorial organizations which in this way either prepare pupils for examination or simply direct their private study. Upon application a competent tutor is appointed who assists the student by advising as to what books or portions of books he should read, by setting papers and revising the answers, and generally by directing and supervising the work done. Apart, too, from the advice and tuition thus received, many will find the sympathy and even the mere participation of another in their work to be most helpful and encouraging. Of course, not all tutors nor all associations will be found equally satisfactory, and there is some little danger of fraud which must be guarded against. The fees are generally low, but they vary according to circumstances, being less, for instance, in the case of some subject in a popular examination for which several persons are preparing simultaneously.

In the case of classes organized in connection with a university, information can be obtained on application to the secretary for the correspondence classes at the university.

University Extension.—The University Extension movement which had its origin in 1872, has since then attained great dimensions. Provided that expenses are guaranteed, several universities are prepared to send to any town a competent graduate to give a course of lectures on subjects of interest or utility. A course usually consists of twelve weekly lectures of about an hour's duration, each followed by a class in which instruction is more informal, questions being answered, papers set, essays corrected, and advice given. Persons who are not willing to follow the course systematically may nevertheless attend any lecture they please on payment of a small fee. At the conclusion of the course an examination is held in the subject-matter of the lectures, the examiner being a different person from the lecturer, and certificates are awarded according to the reports of

examiner and lecturer. Prizes are also sometimes given in cases of exceptional merit. The lecturer is paid a fixed sum, the sum being provided by the locality at which the lectures are delivered. The fee for attendance, therefore, varies considerably, but is never large. The lecturers may bring with them a library of books likely to be useful to the class.

While for the majority of those attending them the University Extension courses are intended as a sort of substitute (inadequate certainly, but the best that can be provided) for a university career, the promoters of the movement have also throughout regarded them as possible stepping-stones to such a career for those who give proof of marked capacity. With this end in view Cambridge University grants the privilege of affiliation, by which the necessary term of residence is shortened by a year, to those who have followed a prescribed system of courses with success, and the fact may be worth mentioning that on at least one occasion provision was made at Oxford for the education there of a working-man who had shown exceptional capacity in his Extension work.

The Extension movement is at present carried on by the universities of Oxford, Cambridge, London, and Manchester. In connection with Oxford, local committees have been established in nearly two hundred places in England and Wales. One development was the endowment of lecture-ships and the foundation of permanent Extension colleges at Exeter and Reading.

The foundation of the Ruskin College at Oxford, which was intended to be the prototype of many similar institutions to be established throughout the country, embodies a new idea. The chief object is to enable working-men "to take an intelligent interest in the problems which are around [them]". The scheme not only includes correspondence classes and extension lectures, but makes provision for working-men, married and unmarried, to follow a course, ranging from a month to a year, at the university.

Home Reading Union.—Another institution, having in view the same object as those already described, is the English Home Reading Circles' Union, an institution modelled upon the American Chautauqua. The directors of the union publish annual lists of the best books, and suggest courses of reading on all kinds of subjects. The promoters of the movement have especially looked forward to creating a household interest in these studies, and where a whole family or several members of a family can thus be induced to participate in the circle, its beneficial effects are very largely increased. When the lists have been out for some months, question papers relating to the work done are sent to the members, and their answers are revised and returned to them. To such as prove themselves by their answers to have followed a course of reading intelligently and profitably for a certain period certificates of proficiency are granted. The fee charged is small. Further information may be obtained from the Secretary, Surrey House, Victoria Embankment, W.C.

RECENT EDUCATIONAL PROGRESS.

It has been considered advisable to add a short summary of the important changes which have been recently introduced into the educational systems of the United Kingdom, and to indicate other changes likely in the near future. To those who have not followed in detail the progress of the movement such a survey may be useful, because the educational revolution, as it may be styled, is as yet very far from complete, and has touched different districts very unequally. Thus it happens that existing establishments and existing systems vary greatly in character and efficiency, and the selection of a school should now more perhaps than at any previous time be made the subject of careful and deliberate enquiry. Again, the fact that one of the chief aims in the present movement has been to level and equalize the educational opportunities of all classes makes it the more necessary that individuals should take care to inform themselves as to what these opportunities are and where they exist. But it must further be borne in mind that in the present transitional period new opportunities of all kinds are constantly arising, and it is therefore advisable to be on the watch for the various new movements, local and national, that are yearly initiated. These movements will be chronicled to some extent in the newspapers, though perhaps not often in such a way as to attract notice unless they are made use of in supplying a basis for special editorial or other articles. The Board of Education issues an annual report giving a great deal of valuable information regarding movements and results, and this may be easily obtained at the cost of a mere trifle. Publications issued annually, like *Hazell's Annual*, often supply useful information, as also such publications as the Annual Reports of the National Association for the Promotion of Technical and Secondary Education.

Since the educational systems of England, Wales, Scotland, and Ireland differ in some important respects, it will be the most convenient course to consider them separately.

England.—Among notable events in the history of education in England are the institution of the Board of Education by the Act of 1899 (taking effect in 1900), and the passing of the Education Act of 1902. The English Education Act of 1870, important as it was, did not set up a complete national system of elementary education—far less of secondary education. It had not, like the corresponding Scottish Act of 1872, a national system already established as a basis to build upon, and the result was that though school boards became common they were far from universal, and did not exist even in a number of towns of considerable size. They were adopted chiefly where the educational machinery was most manifestly defective, and continued to increase in number till the system came to an end through the Act of 1902, but even at the last a greater number of children were in attendance at the voluntary schools than at the board

schools. Where there was no school board set up there had to be a somewhat similar body—a school attendance committee—to see that the children had reasonable facilities for acquiring elementary education, and were kept at school, but the voluntary schools had their own special managers, by far the greater number of the schools being the so-called national schools provided by the Church of England. The school boards had as one important duty to provide schools in their district if there was not sufficient school accommodation, and in order to enable them to do so they could levy a school rate. School-attendance committees had not this power, and thus the voluntary schools had largely to depend on voluntary subscriptions, though both they and the board schools received grants from Government on exactly the same terms, the amount of these grants depending upon the reports of the Government inspectors. Education made great progress under this system, as amended by Acts of Parliament subsequent to 1870; attendance, not at first compulsory, became so; the school age for attendance was extended; and in 1891 an Act provided that the parents of every child should have the right to demand free elementary education. Subjects higher than what might be considered merely elementary were taught, more especially in schools to which the name “higher grade” was given.

The passing of the Act of 1902, considered merely as a measure for the furtherance of education, and apart from religious questions, has been generally considered by educationists a step in the right direction, though the results of any such measure cannot fully appear before the lapse of a considerable interval of time. By this Act (and that for London, 1903) board schools, as such, are done away with, and elementary schools in general—whether denominational or not—are now placed under the control of County Councils and Town Councils, all boroughs with more than 10,000 inhabitants, and urban districts—or districts treated as towns—with 20,000 inhabitants, being entrusted with the general management of their schools, which are now supported from the rates. The councils see that the money required for their schools is furnished by means of the rates (in addition to the grants from Government funds), and under the councils are placed the managers of the different schools or groups of schools. The schools corresponding to the old board schools are now called “provided” schools, because provided by public money; the denominational or voluntary schools, which also receive their share of the rates, are known as “non-provided”.

Up to 1900 the central authority for primary education in England and Wales, the Education Department, was under a committee of the Privy Council, while technical and scientific education was under another department, the Science and Art Department, South Kensington. In the year mentioned the Board of Education absorbed or took the place of both these bodies, having at its head a Minister for Education, and taking charge of elementary education, technical and higher education in science and art, &c.

Among subjects which are receiving much attention since the institution

of the Board of Education and the Act of 1902 are higher elementary education and secondary and technical education, subjects the importance of which has, of course, long been recognized.

A special type of higher elementary schools was provided for in the code of 1905. These are intended for scholars who will probably be entering employment of some sort at the age of fifteen or shortly after, and the age for entrance is set down at twelve, the course to last normally for three years, or, in exceptional cases, for a fourth. The curricula may differ to some extent according to the range of occupations open to young people in particular districts; and "the instruction should differ from that of the elementary school on the one side by carrying the general and fundamental subjects of its course, and particularly the subject of English, to a higher standard, and from that of the secondary school on the other by including instruction with a more special aim and more technical outlook than ought to find a place in the general education which it is the function of the secondary school to supply". These schools are thus specially suited for boys "who cannot afford the time for a secondary school course, but who, at the age of twelve, are ready for more advanced instruction than the elementary school can give, and for some practical teaching on the lines of the occupation which they are intended to follow".

While education, so far as it is compulsory, is provided for in the elementary schools, the schools intended to carry it further are of the most varied and miscellaneous kind. Many of them are under the local authorities and can justly claim to be secondary schools of a satisfactory type, but others fall much below the standard set up by the Board of Education for secondary schools, though it is admitted that they may be doing useful work in their own sphere. Altogether there are now about 800 secondary schools in England receiving grants from the Board, and of those about 180 are under full popular control. The definition of a secondary school as given by the Board is a school "which offers to each of its scholars a general education of a wider scope and higher grade than that of the elementary school, given through a complete progressive course of instruction continuing up to and beyond the age of sixteen". Such a school must offer at least a four-year course, and the subjects laid down are: (i.) the English language and literature, together with geography and history; (ii.) a language other than English; (iii.) mathematics and science, both theoretical and practical; (iv.) drawing; with practical housewifery for girls, and manual work and physical exercises for both boys and girls. (See Report of the Board of Education, 1906.) Any school of the type of a secondary school, though not desiring a grant or on technical grounds not qualified to receive one, may be inspected free of cost, and if the report is satisfactory is placed on the official list of secondary schools recognized by the Board as efficient.

The impulse given to secondary and technical education in England is traceable in no small degree to the Technical Education Act of 1889 and the Local Taxation (Customs and Excise) Act of the following year. The

former act enabled local authorities to levy a penny rate in order to provide for such technical education as, subject to the approval of the Science and Art Department, might seem to be required. Technical instruction was defined for the purpose of the act as instruction in the principles of science and art applicable to industries, and in the application of special branches of science and art to specific industries and employments, as well as all other instruction in science and art which might receive the sanction of the Department, and any other instruction, including modern languages and commercial and agricultural subjects, sanctioned by the same body. Much has been done for technical education under these acts, partly by means of the special rate, partly by the Exchequer's contribution available under the second Act, latterly amounting to nearly a million sterling. Under the Education Act of 1902 the powers of local authorities have been increased; the new education authorities having been given leave to spend upon higher education, including technical secondary education, such sums out of the rates as they think fit; except that in counties the amount is not to exceed the proceeds of a 2d. rate, unless by permission of the Local Government Board.

The increased demand for technical education led to the establishment of the City and Guilds of London Institute (1878), and the connected Central Technical College, South Kensington, a college for higher technical instruction, the City and Guilds Technical College, Finsbury, being an intermediate college. The Imperial College of Science and Technology, established by Royal Charter in 1907, governs the City and Guilds College and also the Royal College of Science and the Royal School of Mines. There are also the South London School of Technical Art, with a number of technical institutes, polytechnics, &c., established in London, many maintained by the County Council. Technical institutes, and colleges have also been established in various large towns, as Manchester, Liverpool, Bradford, Derby, &c.

The chief distinction between the instruction given in a technical school and that in the science classes of a secondary school usually lies in the fact that the former has a more immediately practical bearing, whereas the latter treats more thoroughly of the general principles underlying practical work, and generally requires to be supplemented by a more specialized course afterwards.

The work done by the Science and Art Department (now merged in the Board of Education) has long been important. There is an annual parliamentary grant from which aid is given in the form of: (i.) Maintenance and instruction of teachers and students attending the Royal Colleges of Science and Art, London, and other approved centres; (ii.) loans and grants to local museums and science and art schools; (iii.) payments to managers of science and art schools and classes, free studentships and scholarships, exhibitions, prizes, medals, &c. The most valuable awards are a certain number of exhibitions and studentships which enable the student to maintain himself while going through a three years' course of instruction at the

Royal College of Science, London. The Whitworth Scholarships and exhibitions for young men who have adopted the craft of mechanical engineering are connected with this department.

In the highest branches of education the changes of the past few years have been in the direction of expanding old foundations or creating new ones. A list of the universities of the United Kingdom, and of colleges approximating in the advanced character and comprehensiveness of their curricula to the university type, has already been given in a previous section. As regards higher technical education, if understood to include instruction in the highest branches of applied science, much has been done, though in unequal degree, both at the various universities and at the other institutions referred to, to meet modern needs. The provision, however, in respect of higher commercial education remains very inadequate, though gradually extending as already indicated. The arrangements made with regard to such education in the London University, to be considered later, are of high importance.

Wales and Monmouthshire.—Much of what has been said about England holds of Wales also. Owing in part to the inadequacy of the provision for education then existing in Wales, the Welsh Intermediate Education Act of 1889 was a far more thorough measure than any then enacted for England, and gave a great impulse to education in Wales. The Act provided that there should be formed in every county and county borough in Wales and Monmouthshire a Joint Education Committee of five members, three nominated by the local authorities and two by the Education Department, who in co-operation with the Charity Commissioners were to direct and control the organization of secondary and technical education. In addition to the endowment funds, previously administered by the Charity Commissioners, the proceeds of a halfpenny rate which the counties and county boroughs were authorized by the Act to raise, and an equivalent grant from the Treasury, were placed at the disposal of the new authorities. The proceeds of the Technical Instruction Act and the Local Taxation Act already mentioned in connection with education in England were also placed in their hands. For the inspection and examination of secondary schools, there is an Intermediate Education Board. For elementary education the local authorities, under the Act of 1902, are similar to those of England. A notable feature is the relations which have been formed between the authorities for secondary and technical education and the Colleges of the University of Wales. A Welsh Department of the Board of Education was established in 1907.

Scotland.—The Technical Instruction and Local Taxation Acts mentioned in connection with education in England apply also to Scotland, and in other respects educational development has moved to a great extent on similar lines in the two countries. In Scotland, however, recent changes have been less considerable, owing to the fact that education has always been very largely under local management. The school boards are still the local authorities, and under them are a number of higher grade schools, high

schools, secondary schools, burgh schools, &c. There is a separate Scotch Education Department, under a committee of the Privy Council.

In connection with higher schools there is what is called the Leaving Certificate, obtainable by pupils passing an examination, and rendering easier their entrance on a university or professional career. The fund managed by the Carnegie Trust (capital £2,000,000) has done much for the Scottish universities and their students, being available for the payment of students' fees.

Ireland.—Education is in a less advanced condition in Ireland than in Great Britain. The Technical Instruction Act of 1889 applied to Ireland, but the funds obtainable under the Local Taxation Act of 1890 are not available for education. However, the English Board of Education has continued the grants for science and art schools and classes. Agriculture and Technical Instruction are under the Department of Agriculture. Central institutions are the Royal College of Science and the Metropolitan School of Art.

THE RECONSTITUTED LONDON UNIVERSITY.

Considering how recent, extensive, and novel are the changes which have been effected in the constitution and purposes of the London University, a brief account of these changes may be found useful. The university derived its origin from University College, Gower Street, established as a teaching institution and opened in 1828, being founded by a joint-stock company. In 1836 two charters were obtained, one for London University, which was to have power to examine candidates and grant degrees, the other to a teaching body, with the name of University College, having as its object the preparation of students for the degrees conferred by the university. Previous to 1900, when the university was reconstituted, there had long been a demand for the institution of a teaching university in London.

There are now two principal classes of matriculated students, namely, internal students, who belong to a college or institute recognized as a school of the university, or who attend lectures given by recognized teachers of the university; and, secondly, external students presenting themselves as formerly at stated times for examination. Internal students have to qualify for admittance to the university examinations by following duly the courses of study prescribed for them. Students attending evening classes only, but following prescribed courses under recognized teachers, rank as internal students. The interests of external students are the care of a special council, which advises the Senate as to the courses of study to be recommended to such students, and as to the terms upon which they may be admitted to lectures and to other advantages possessed by the internal students. External students who have graduated as well as matriculated are able to enter for the next higher examination as

internal students upon fulfilling the conditions applying to such students. Special conditions, though somewhat different from those formerly existing, apply to candidates for degrees in medicine and surgery. Regulations are also laid down as to students working for research degrees.

The authority of the university, that is of its supreme governing body the Senate, over its schools and teachers, does not extend very far. It has a certain power of directing and controlling the course of study pursued by matriculated students, and of inspecting and reporting upon their work from time to time. On the other hand, teachers of the university, including of course those in its schools, are admissible as members of the faculties and boards of the university, and have the principal share in determining the courses of study to be prescribed. The following institutions are already recognized as schools of the university:—In all the Faculties in which they respectively afford instruction, University College, London, and King's College, London; in the Faculty of Theology, Hackney College, Hampstead, New College, Hampstead, Regent's Park College, the Wesleyan College, Richmond, the London College of Divinity, commonly called St. John's Hall, Highbury; in the Faculty of Arts and Science, the Royal Holloway College, Egham, and Bedford College for Women; in the Faculty of Arts, Westfield College, Hampstead; in the Faculty of Science, the Royal College of Science, and (in Agriculture only) the South-Eastern Agricultural College, Wye, Kent; in the Faculty of Medicine, the Medical Schools of the London Hospital, St. Bartholomew's, Guy's, St. Thomas's, St. George's, the Middlesex, St. Mary's, the Charing Cross and the Westminster Hospitals, the London School of Tropical Medicine, Lister Institute of Preventive Medicine, and the London (Royal Free Hospital) School of Medicine for Women; in the Faculty of Engineering, the Central Technical College of the City and Guilds of London Institute; in the Faculty of Economics, the London School of Economics and Political Science. The Commissioners desired to include the Inns of Court and the chief musical institutes of the metropolis, but in this they were not successful. In the meanwhile there is a Faculty of Law; and there is also a faculty, with recognized teachers, of Music, and degrees may be taken in that subject. The Senate may admit as schools of the university other institutes which possess the necessary qualifications and are situated within the prescribed area, *i.e.* "the administrative County of London, including the County of the City of London". The teaching staff comprises two categories of teachers, namely, "appointed teachers" who are appointed by and paid from the funds of the university, and "recognized teachers", teachers appointed and paid by the several schools of the university, and recognized by the Senate as giving instruction up to the university standard.

The inclusion of Commerce and Industry as one of the branches of the Faculty of Economics and Political Science merits a few remarks. For some years previously courses of lectures on commercial subjects, such as commercial geography, international trade, foreign tariff legislation, the commercial organization of foreign countries, the railway systems and

methods of administration of England and foreign countries, had been delivered, and scholarships and other emoluments awarded, at the London School of Economics, now a school of the university, and these courses had been attended by business men as well as by students. The scope of this work has been considerably extended by including new subjects, by supplementing the courses of lectures with regular tuition, by enlarging the already very considerable library and collection of useful reports and documents, and in various other ways. The scheme will not be carried out to the full extent contemplated without a large endowment, but considerable sums have already been contributed by the London County Council and private donors.

TRAINING IN AGRICULTURE.

The term Agriculture in its widest sense includes not only tillage and pastoral, dairy, and poultry farming, but various other occupations rural in themselves, or usually associated with rural surroundings, such as horticulture and bee-keeping. It is a point which must be fully appreciated, that in agriculture a good scientific training is becoming increasingly important, while for some of its branches a very large and varied scientific knowledge is necessary. Agriculture is to some extent taught in many rural elementary schools. The subject has also received attention in various secondary and technical schools, maintained or assisted by the county councils, county boroughs, and other local authorities. Some of the county councils in particular have shown energy in arranging for courses of lectures to be given locally, and in organizing county agricultural and dairy-farming schools. In order to provide suitable equipment for the higher branches of agricultural training, many local authorities, especially county councils, have acted conjointly in founding and maintaining colleges; others have helped to maintain independent institutes. Various scholarships and other aids are awarded by the local authorities.

The Board of Agriculture receives an annual parliamentary grant to assist schools other than public elementary schools which give efficient and suitable instruction in matters connected with agriculture or forestry, and to assist systems of lectures and instruction in the same subject. For many years the Board has devoted the bulk of its funds to assisting institutions working for groups of counties, and there are now some twenty institutions receiving grants from the Board, a good number of these being collegiate centres also receiving grants from county councils. The Customs and Excise Act of 1890 has enabled the county councils to spend large sums in aid of agricultural education. Many of the institutions have farms connected with them at which practical instruction in farming, dairying, poultry-keeping, horticulture, &c., is given and experiments on soils, manures, crops, and stock are carried out. Some institutions devote special attention to one branch or another; the University College, Reading, for example, is a great centre for dairying, poultry-keeping, and horticulture.

Degrees or diplomas in agriculture are granted by various universities and colleges in England and Wales, Scotland and Ireland. Degrees of B.Sc. in agriculture are granted by the universities of London, Durham, Leeds, and Wales, &c.; at Cambridge the ordinary B.A. degree may be obtained through the medium of a special examination in agricultural science. The courses of instruction usually extend over three years after matriculation, and include practical work, the subjects of examination covering the whole field and being of an advanced scientific character. The Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland, in co-operation with the Board of Agriculture and the Scotch Education Department, grant a national diploma in agriculture (N.D.A.) and one in dairying (N.D.D.) after examination. The Board of Agriculture issues an annual report on agricultural education which costs a mere trifle.

A list of the chief agricultural colleges in the United Kingdom will be found in *Whitaker's Almanack*.

II. EDUCATION OF GIRLS.

As much of what has been said in the article on the "Education of Boys" applies equally to girls, or with such differences as common sense will at once supply, the reader is advised first of all to consult that article, especially in its more general sections, for instance that on the "Choice of a School". The present should be regarded rather as supplementary, dealing only with matters concerning the education of girls which either have not yet been touched upon, or require some further elucidation.

To the reason given in the previous article for the increased importance of education, it may be added here that even for girls who do not look forward to the necessity of earning a livelihood, a sound general education is now considered essential. The broad and liberal curriculum of the public schools, and of some of the private schools, affords promise of far better results than the showy accomplishments which, some forty years ago, made up the sum of a girl's education. A warning, however, must, unfortunately still be entered against the narrow moral training even at the present day given in some private schools. Good manners, for instance, are better taught by example, by a gentle word or look, than by such finical rules as "the tea must not be stirred twice", which tend to breed affectation and self-consciousness.

It is necessary to insist on the importance of proper recreation. Plenty of outdoor exercise is an excellent antidote to affectation, ennui, and headache. Too little attention has been given to the physical development of girls in the past, though a sense of its importance is no longer lacking. Apart from play, some systematic training is desirable, such as Ling's Swedish Drill, described under "Home Gymnastics", in order that no part

of the physique may be neglected. Exercises, such as riding and fencing, tending to a one-sided development, should be counteracted, or rather supplemented.

Such games as cricket have more than a physical influence, tending as they do to develop social qualities, co-operation, self-restraint, obedience to laws, command of temper, and rapidity and decision of thought and action, and these lessons are as valuable to girls as to boys. Both play and drill should be regular, and should be looked upon as a necessary part of education. All girls, of course, cannot stand an equal amount of exertion. What is moderate for one is excessive for another, and over-straining is as great an evil as under-development. It is well to remember, however, that the evils of excessive mental effort are not cured by gymnastics, though judicious physical exercise tends to stimulate a healthy mental growth.

It has seemed necessary to enter into this question at some length, owing to the tendency, still prevalent, though diminishing, to overlook its importance. In some schools, of course, better arrangements are made for outdoor games and gymnastics than in others, and the matter should be allowed due weight.

General Education.—The kindergarten is a fairly satisfactory foundation for any sort of education. There are many private kindergarten, some of which are no doubt good and others perhaps bad, but the merits of such schools can only be learned by personal investigation. A kindergarten department is also attached to the majority of public elementary schools.

Some private schools devote themselves entirely to elementary education, but of course most of them, as well as the public schools, have preparatory classes.

In Scotland mixed schools (for both boys and girls) have always been common, and girls share the advantages of the public schools, which make provision for their special needs as regards domestic training, female teachers being attached to the schools. Secondary education is also well attended to in Scotland, perhaps more than in England. As in the case of boys' schools, the day system is the prevalent one.

Private Tuition.—There are many girls totally unfit physically for school life, especially for the rigid discipline of a public school, who will obtain far greater benefit from the more elastic routine of home education, provided only that it is good of its kind.

In selecting a governess, attention must be given to certificates, diplomas, degrees, and similar evidences of knowledge and teaching capacity. To avoid confusion it should be remembered that women cannot hold Oxford and Cambridge degrees, though they pass the examinations for them. For a junior governess, some certificate falling short of a degree, such as the London Matriculation, First-Class College of Preceptors, Senior Oxford or Cambridge Locals, may be a sufficient guarantee of intellectual attainments. Intermediate between these cer-

tificates and degrees are the certificates of the Cambridge Higher Local and the London Intermediate Arts or Science.

For elementary teaching a sound general knowledge should be required of the teacher, though it need not be very profound. The more advanced the education required, the more difficult it is to find one person capable of giving adequate instruction in every subject of a liberal curriculum. It may often be advisable to supplement the home teaching by classes at a good college, or the University Extension lectures may sometimes be found useful.

Apart from mere intellectual attainments an important qualification is the ability to teach, and it is well to ascertain if a governess has been specially trained before engaging her. The best-informed are not always the cleverest teachers, and it is well to remember that in unskilful hands children may suffer great harm. A diploma of some training college, the Cambridge Teachers' Certificate or an equivalent qualification, is no small recommendation.

In a nursery governess a knowledge of kindergarten methods is desirable; even in an elementary junior governess some such knowledge will be found useful in order to avoid a break between the teaching of the nursery and that of the school-room. The National Froebel Union, representing the Froebel Society, the Kindergarten Company, and the Home and Colonial School Society, give certificates to kindergarten teachers after examination.

With regard to the treatment of governesses, it must be borne in mind that (in many cases) they are ladies, and it is always possible to employ one who is. She should be made as comfortable as possible, and reasonable time should be allowed her for rest and recreation. The most able teacher cannot do her duty continuously if her health is allowed to suffer from domestic discomfort or want of recreation. Her authority should be supreme in the school-room and not impaired by petty interruptions such as trying on new boots or pinafores during lesson-time, still less by a supercilious or off-hand treatment. This, needless to say, is not more for her own sake than for the sake of those in her charge, who will not pay adequate respect or attention to her if they find that she is not respectfully treated in the house.

Day and Boarding Schools.—The corresponding sub-section in the article on "Education of Boys" may again be referred to, as most of what is stated there is also applicable here. In day schools the home influences are more powerful than the school influences, but in boarding schools this is reversed; in the latter there is less likelihood of irregularity of attendance, due to counter attractions and interruptions, while the social life may be broader or narrower than in the home, according to circumstances. So much depends on the nature and locality of the home, the temperament and health of the girls, and the school selected, that it is impossible to lay down any hard-and-fast rules on this matter.

Endowed Schools.—The increase in the number of endowed schools

has been greatly accelerated by the action of the Charity Commissioners in appropriating to the education of girls endowments which previously had been devoted to that of boys alone, or in some other cases to totally different objects. Among the endowments which have been thus redistributed may be mentioned the following:—

(1) King Edward's Endowment, Birmingham, which now supports four grammar schools, accommodating 780 girls, and a high school for 260 others. The fees average about £9 a year, whereas the actual cost of the education is about £20, the debt being made good out of the endowment funds.

(2) A large sum at Bedford known as the "Harpur and Dame Alice Endowment for the Education of children and youths". The endowment now helps to maintain a high school and a modern school for girls. The former is by far the more popular of the two in spite of the higher fees, £12 a year as against £9 for the modern school, and is a school of very good standing. It is worth mentioning that boarding houses have been established in the vicinity for pupils whose homes are at a distance. The curriculum is drawn up so as to satisfy the individual requirements of the pupils.

Christ's Hospital now supports at Hertford a school for 280 girls whose education and maintenance is wholly or partly free. Admission is extremely difficult, being generally either by presentation of a governor or else by a competition restricted to the pupils of certain endowed schools, or of public elementary schools within the County of London. No pupil whom her parents can afford to educate is admitted, and parents who appear capable of so doing may be called upon to contribute something towards maintenance. A list of governors having presentations can be obtained from the hospital for one shilling.

There are many other endowments similar to those which have been mentioned, such as Bradford Grammar School, the Jones Foundation, Monmouth, and the Roan School at Greenwich. The last named, it may be added, provides a second and a third grade education with scholarships to higher institutions.

Among more recent endowments exclusively for girls is the City of London School for Girls, established by the Corporation of London. The City Companies have also come forward to assist the education of girls with their surplus funds. Among the schools endowed by them may be cited: The North London Collegiate School, a high-class school for girls from eight or nine up to nineteen years, founded by the late Miss Frances Mary Buss in 1850, and the Camden School, an offshoot from the former, for girls from six or seven to seventeen. Both have been endowed by the Brewers' Company, while the large hall attached to the North London, accommodating some 500 girls, was built by the Clothworkers' Company. Other such schools are Aske's Hatcham School, endowed by the Haberdashers' Company, and the Skinners' Company Girls' School, Stamford Hill. The Manchester High School, and many more, are also indebted

to wealthy city companies for their endowments. An excellent guide to such schools is the *Girls' School Year Book*.

Private Schools.—The so-called “finishing schools”, in which girls acquired a smattering of general knowledge and some showy accomplishments, have almost entirely disappeared. The standard of the very few that remain has been raised by the competition of the public schools, the opening of the university examinations to women and girls, and the general advance in all things concerning girls and women.

Although private day schools with high fees flourish in some districts, it is generally the large boarding schools that are most in demand and provide the highest form of education. Many of these stand in their own grounds and afford plenty of opportunities for outdoor games. The staffing of girls' private schools is usually higher than that of boys; on an average there is one teacher to ten pupils as against one to fourteen for boys.

Proprietary Schools.—Proprietary schools are perhaps more popular for girls than for boys. Only a few can here be particularized. The most notable groups of proprietary schools, *i.e.* self-supporting schools managed by a company, are those belonging to “The Girls' Public Day Schools Trust”, and “The Church Schools Company”, the former numbering thirty-three schools and the latter fourteen. The Trust was founded in 1872, and its schools—called “High Schools”—are mostly in the Metropolitan area, with others scattered over England, the office being in London. The schools are intended to hold a like position for girls to that held by the great public schools for boys. Particular stress is laid on moral and religious training, and on fitting girls for the practical business and duties of life. The Trust was the pioneer of girls' public schools and originated the designation “high school for girls”. The fees in the Church schools range from five to fifteen guineas a year; in those of the Trust they are rather higher. The schools may be classed as first and second grade. In the latter the leaving age is about sixteen, and the education is at a cheaper rate.

Cheltenham Ladies' College, founded in 1848 to correspond with the boys' college in the same locality, is a proprietary institution of the very highest rank. The education covers a wide field. There is a kindergarten department for children from three to eight and a junior school for those between that age and twelve. A third department, known as “the School”, continues the education to the age of sixteen, the pupils then passing into the college proper, where an excellent general education is given and pupils are prepared for the London University degrees and other university examinations. There is also a department for training teachers for secondary and other schools.

It is a school for both boarders and day pupils and occupies an extensive range of buildings. There are a number of boarding-houses in connection with it, besides St. Hilda's College (named after the model of the hostel of similar name at Oxford), in which senior students over eighteen years of age are received. The Princess Hall, used for large

gatherings, is capable of accommodating 1500 persons. There are over six hundred regular pupils, or about a thousand altogether, including those taking up some special study. The fees for tuition vary from nine to twenty-four guineas a year; those for board at the boarding-houses vary from fifty-four to ninety-three guineas a year. There is one scholarship at Cheltenham reserved for the daughter of an army officer; another, tenable at St. Hilda's Hall, Oxford, is awarded annually. Associateships may be granted to certain pupils who may be allowed to attend any of the ordinary classes without paying fees.

Another well-known proprietary school or college is Queen's College, Harley Street, London, founded in 1848. There are a senior and a junior division and a school for younger pupils. The normal age for admission to classes in the senior division is sixteen years. The classes in this division qualify for the associateship and fellowship of the college or for university examinations. To obtain the former qualification candidates have successfully to undergo two annual examinations in five subjects, which must include a language, mathematics, and history or theology. The fellowship is awarded for special distinction in some single branch of study. Girls under sixteen are placed in the junior division or in the school. Several scholarships are available, the particulars concerning which can be obtained from the college.

This section may be concluded by the mention of St. Leonard's School, at St. Andrews, Fife, and Wycombe Abbey School, Bucks, which represent perhaps the most advanced type of public schools for girls. Designed after the model of the large public schools for boys, the two hundred or more boarders are accommodated in several houses, each under the charge of its own mistress. Every comfort is provided; separate cubicles furnished with every requisite, including a bath; separate tables and bookshelves for preparation, &c.

A broad and liberal education is aimed at, while the hours of study do not, even in the highest forms, exceed six hours a day, and a special feature is made of outdoor physical exercise. The subjects taught include carpentry, gardening, and bookbinding. The grounds are extensive, and ample opportunity is afforded for playing such games as cricket, hockey, fives, golf, tennis, and lacrosse. The fees are high, being, roughly speaking, £100 a year without extras. The age of admission is from thirteen to fourteen, and applicants have to pass a suitable examination.

At St. Andrews there is a preparatory school (St. Katherine's) for younger pupils, and at Wycombe Abbey a similar school.

For other proprietary schools doing good work the Girls' School Year Book may be consulted.

High Schools.—The term High School is much abused, but, speaking generally, it may be taken to mean a first-grade school, or at least a second-grade school of the best kind. Parents should ascertain whether a so-called High School is what it professes to be. The expression "High School System" adopted by some private schools is misleading.

A private school with fifty pupils cannot provide, at the same fees, education of the same quality as a public school with three, four, or five hundred pupils, but it may have advantages compensating for its greater expensiveness.

Polytechnic Schools.—There are also schools connected with polytechnics and technical institutions which afford a secondary education at moderate fees. The Regent Street Polytechnic School will serve as a type. In connection with the South-West London Polytechnic, Chelsea, there is a college for girls over fifteen.

Public Elementary Schools.—Primary education for girls is provided in the elementary schools throughout the country. Sewing, laundry work, and cookery are taught, but the first only is obligatory. Schools which have not sufficient accommodation for cookery and laundry-work classes are usually connected with a centre to which the pupils are sent. Outside pupils may attend the classes on payment of a small fee. The cookery course extends over six months and the laundry work over three.

Final Education.—A very large number of the women of this country are obliged sooner or later to earn their own livelihood. In such cases those who have a systematic training in some definite line of work have a better chance in the fight for life than those who have only their half-forgotten school work to fall back upon. Apart from any such necessity, a good education greatly increases the interests, happiness, and influence of life, broadens the intelligence and sympathies, and promotes steadiness of purpose; so that a good education is not wasted even upon women who never need to utilize it for a livelihood.

Technical Education.—The domestic sciences, cooking, laundry work, housewifery, are subjects of which women have almost a monopoly. While most women know something of them, the importance of a systematic training is not adequately recognized. Moreover, a thorough training at a recognized college qualifies for teaching.

The initial step in the teaching of cookery was an exhibition of "food-stuffs" collected for the Science and Art Department in 1857. In 1873 commenced courses of lectures, illustrated by practical demonstrations, in connection with the International exhibition. These became so popular as to lead to the establishment of "The National Training School of Cookery" in Buckingham Palace Road. The movement rapidly spread. Other schools sprang up all over the country, giving rise to a demand for trained teachers of cookery, which was further increased in 1882 by the grant offered by the Education Department for cookery in elementary schools. In 1890 a grant was offered for laundry work, and many schools arranged classes for the teaching of this subject. Since 1890 grants have also been made by the County Councils to schools for teaching the domestic sciences, and cooking and needlework are now taught everywhere.

There are now numerous schools whose certificates are recognized by the Education Department as giving evidence of sufficient training in cookery to enable the holder to teach the subject. Besides the original

school in Buckingham Palace Road, the Battersea Polytechnic Training College has an excellent curriculum, of which technical chemistry in its application to domestic work forms an important branch. Certain scholarships are offered by the London County Council, tenable at these schools.

The "National Union for the Technical Education of Women in Domestic Science", which came into existence soon after the establishment of the National Training School, has been a principal agent in the spread of domestic knowledge. There are schools in connection with it at Bath, Battersea, Bristol, Glasgow, Gloucestershire, Leeds, Preston, Sheffield, and elsewhere. Another school, not connected with the above union, is the Glasgow West-End Training School of Cookery. The South Wales and Monmouthshire University College has a cookery school attached.

The Dorset, Devon, Suffolk, and Staffordshire County Councils have also established schools, and the Norfolk and Norwich, the Northern Counties (Newcastle-on-Tyne), Northamptonshire (Northampton), North Midland (Leicester), Salisbury, Wiltshire, Chester, Manchester, Liverpool, and Birmingham Education Committee, the Edinburgh, Aberdeen, and Dublin Schools may be added to the list of those recognized by the Department. In addition to the foregoing there are many private schools and classes in cookery, laundry work, dressmaking, millinery, housewifery, and other subjects. Most of the schools just mentioned as cookery schools, and the City and Guilds Institute, give instruction in laundry work as well as in cookery, and a certain number include household management generally.

Among the institutions affording instruction in dairy work whose certificates are recognized by the Education Department are the following:—Bath and West and Severn Counties Agricultural Society, British Dairy-Farmers' Association, Durham College of Science, Eastern Counties Dairy Institute, Midland Agricultural and Dairy Institute, University College of North Wales (Bangor), University College of Wales (Aberystwyth), University College, Reading, and Warwickshire County Council Dairy Farm.

Classes in many other branches of technology are open to women at the Central Technical College, Exhibition Road; Finsbury Technical College; and other institutions, including polytechnics, technical institutions, and the technical classes of many colleges, &c. Women have already adopted other technical professions, lithography, photography, and cabinet-making, and the Royal Institute of British Architects, admits ladies as associates. Every year that passes sees fresh branches of technical science taken up by women students.

Attention should also be drawn to horticulture as an occupation for women, as there are now a number of institutions in which they may obtain training in this subject, such as the Gardening School of the Royal Botanic Society; University College, Reading; Studley Horticultural College; Edinburgh School of Gardening for Women, &c. Thorough training may be obtained at the Swanley (Kent) Horticultural College, where the fees are from £70 to £80 a year for board, residence, and instruction.

Bee-keeping, poultry-farming, dairy work, table decoration, and bouquet-making are among the subjects taught. Scholarships are granted by the County Councils of Kent, London, Norfolk, and Stafford. The examinations of the Royal Horticultural Society, The National Agricultural Examination Board, The Board of Education in Agricultural Science and Rural Economy, &c., are now open to women.

Various pursuits of a technical character are taught at some higher schools for girls, such as china-painting, modelling, repoussé work, bent-iron work, wood-carving, marqueterie, photography, besides plain needle-work, dressmaking, &c.

University Education.—University education is sought by many women as a preparation for certain professions, such as teaching, the higher departments of journalism, &c., and by many others simply from a desire for that higher culture which till recently has been almost wholly restricted to men. The institutions supplying the demand for such an education are in many respects similar to those for men. There are isolated colleges of university standing; and universities, examining, teaching, and—in part at least—residential. The classification of the universities under these three headings is not precisely the same for women as for men. For example, Oxford University, which, as far as men are concerned, is almost purely residential, does not require residence of women entering for its examinations; but at both Oxford and Cambridge there are institutions for women of a similar character to the men's colleges. In certain important respects the position of women at some of the universities differs from that of men: they enjoy certain privileges and are subject to certain disqualifications. Mention is made of these differences in the account of the universities individually.

London University and Metropolitan Colleges.—Of the colleges now forming "schools" of the University of London there are five open to women, namely, University College, Bedford College, Royal Holloway College, Westfield College, and King's College—Women's Department.

Long before it became a teaching (as well as an examining) university London admitted women to its examinations without restriction of any sort. There are many scholarships and exhibitions in connection with it which are open to both sexes. For particulars apply to the Registrar, London University, South Kensington, S.W., and consult the University Calendar. In so far as it is an examining body, candidates for examination can obtain their instruction where and how they like.

At the Royal Holloway College, Englefield Green, Egham, the fees, inclusive of board, are £90 a year. It is a residential institution for women only, the faculties being those of Arts and Science.

At Bedford College, York Place, Baker Street, an institution for women only, the fees for the classes vary from two to six guineas a term, and for residence from £50 to £60 a year. It is both residential and non-residential. Scholarships are offered for competition. The faculties are Arts and Science. There are also an art school and a training department.

At Westfield College, Finchley Road, Hampstead, the fees for board, residence, lectures, and examinations are £35 a term. Non-resident students can enter for a full course, the Arts faculty being the only one. There are some scholarships of from £40 to £60 a year offered annually.

University College, Gower Street, W.C., admits women on the same terms as men to all its classes, except to those relating to the medical profession and engineering, the faculties open being those of Arts, Laws, Science, and Economics. There is a lady superintendent for the women students. Full particulars can be obtained from the secretary. The college is non-residential, but there is a college-hall for women at Byng Place, Gordon Square, the fees varying from £51 to £80 for the session.

Women studying medicine can obtain their instruction in the London School of Medicine for Women, 30 Handel Street, Brunswick Square, W.C. Those living at a distance can find accommodation at the hall in Byng Place.

King's College has a women's branch or department at 13 Kensington Square, W., where classes have been arranged to cover the curricula of the Matriculation and the examinations for the B.A. and B.Sc. degrees of the London University. It is non-residential, but there is also a hall of residence.

Students desiring to obtain good classes at low fees can do so at the Birkbeck Institute, Breems Buildings, Chancery Lane, London. The courses are adapted to meet the requirements of students preparing for the examinations of the London University.

Other Universities.—In the British Isles there are two universities which have not yet granted degrees to women—Oxford and Cambridge.

At Oxford women, except in medicine, may attend most of the university lectures, and enter for the pass and honours examinations. Class lists are published, showing the position of the successful candidates, and certificates are granted to them. Though the regulations are less stringent than for men, the papers set and the rate of marking are identical for both, the difference being that women are allowed greater latitude with regard to the Previous Examination, and may proceed straight to honours without first taking the second public examination (Moderations), while residence is not enforced. It will be seen at once that this leniency diminishes the value of the women's certificate. There is an Association for the Education of Women which takes charge of their education and grants diplomas to all women fulfilling the conditions required for the men's degrees. Intending students should apply for information to the hon. secretary of the association, Clarendon Buildings, Broad Street, Oxford. Through another body, the Delegacy of Local Examinations, women have to seek admission to all the examinations.

There are four colleges for women at Oxford, all being residential. Home students and others living in recognized lodgings or boarding houses are under the superintendence of a lady principal, lectures and tuition being provided by the Association for the Education of Women.

At Somerville College a combined bed and sitting room is provided for each student, and the fees vary from about £27 to about £30 a term,

inclusive of board, lodging, tuition, and lecture fees. At Lady Margaret's Hall the same accommodation is provided at fees of about £100 a year. At St. Hugh's Hall, where two students, having a bedroom each, occupy the same sitting-room, the fees are lower, varying from £70 to £90 a year. St. Hilda's Hall resembles Lady Margaret's. Scholarships are offered at all four colleges.

At Cambridge women are admitted to all the university and many of the college lectures, and they may enter for the Previous and Tripos but not the Pass examinations. They are only examined when they have fulfilled all the conditions required of men for the degree. As at Oxford, class-lists are published, showing the position of the successful candidates, and certificates are granted to them.

There are two residential colleges for women. At Girton the fees, inclusive of everything, amount to a hundred guineas per annum. At Newnham the fees vary from about £30 to about £35 per term. At both, valuable scholarships are open to competition. There is also a women's hall of residence for graduates pursuing advanced work, the charges for board and residence amounting to from £50 to £60 a year.

Durham University, except in respect to the divinity degree, makes no distinction between men and women. It has a hall of residence—Eslington Tower, Newcastle-on-Tyne—at which the fees for board range from £1, 1s. a week. There are, of course, college fees as well.

Victoria University (Manchester) and the universities of Birmingham, Liverpool, Leeds, and Sheffield open their doors freely to women, who, in regard to degrees, scholarships, prizes, &c., are placed practically on the same footing as men.

The University of Wales (constituent colleges—University College of Wales, Aberystwyth; University College of North Wales, Bangor; and University College of South Wales and Monmouthshire, Cardiff) allows women to share all its privileges on equal terms with men. Under certain conditions, women students are allowed to reside elsewhere than in the halls provided for them, namely, Alexandra Hall, Aberystwyth; the Women's Hostel, Bangor; and Aberdare Hall, Cardiff. The charge for board and lodging varies from £30 to £50 per session. Lecture fees can be compounded for about £10 per session, and many entrance scholarships and exhibitions are offered for competition.

At Edinburgh University women are not able to graduate in either law or theology. Though allowed to take medical degrees, they must obtain their medical education elsewhere, generally at the Medical College for Women and at the Edinburgh School of Medicine, the former founded expressly for women at a time when instruction in that subject was difficult to obtain. The tutorial fees amount, roughly, to about ten guineas a year. There are two halls of residence for women: Masson Hall and Muir Hall, the latter for medical students. Edinburgh, unlike the other Scottish universities, has a faculty of Music, for the instruction and degrees of which women are eligible.

At Aberdeen University certain restrictions exist with regard to the medical curriculum, but otherwise men and women stand upon the same footing as regards instruction and degrees, and the latter are allowed to compete for many scholarships, bursaries, &c.

At St. Andrews University the conditions are practically the same, the degrees in arts, science, and medicine, and also the title of L.L.A. (a title special to St. Andrews), being conferred upon women passing the requisite examinations. Several bursaries, scholarships, &c., are open to them. There is a university hall of residence for women who may be reading for a degree or engaged in post-graduate study. Enquiries should be directed to the warden.

At Dundee University College, which forms part of St. Andrews University, women are likewise admitted to all the classes. The courses answer to the requirements for St. Andrews, Edinburgh, Glasgow, and London Universities. Evening classes form an important part of the scheme of instruction.

Glasgow University grants degrees to women, who study at Queen Margaret College, this being the women's department of the university. Enquiries should be addressed to the Hon. Secretary.

In the Scottish universities the funds of the Carnegie Trust may be drawn upon for payment of the fees of women students on the same terms as for those of men.

Dublin (Trinity College), in 1903, admitted women to all lectures, examinations, and degrees in arts and in the medical school, prizes, but not fellowships and scholarships, being open to them. The university colleges are open to women on the same terms as to men.

Other Institutions for Advanced Work.—Women capable of advanced research work are allowed the use of the Faraday Research Laboratory of the Royal Institution, Albemarle Street, W., and graduates and others desiring to pursue their political studies can do so at the London School of Economics and Political Science, Clare Market, Kingsway, W.C.

Supplementary Education.—For those who in after-life can find time, and are disposed to supplement the education, general or special, which they have received, there are organizations providing instruction of every grade and kind—evening continuation schools, polytechnics, technical institutes, university and other advanced colleges. A large portion of the work at all these institutions is done in the evening.

Scholarships.—There are not so many scholarships available for girls as for boys, and there is a great need for more of sufficient value to cover the expenses of secondary education. A great many schools, colleges, &c., offer a few for competition, of which the particulars can usually be obtained on application. Many of the scholarships established by the County Councils and Town Councils are reserved for girls. Particulars can probably be obtained from the secretaries to the education committees of the counties and boroughs, directors of education, &c.

The London County Council offer scholarships of three grades—junior,

intermediate, and senior—about one-third of them being usually awarded to girls. The junior scholarships are generally awarded to children in the public elementary schools who are under thirteen, have reached Standard VI., and the income of whose parents does not exceed £150 a year. They provide free education, and also books and accessories, at a higher grade school or endowed secondary school for two years, with an allowance of £10 a year for board. The intermediate scholarships, which can be competed for by pupils under sixteen in the higher grade or secondary schools, give free education till the age of eighteen in secondary or technical schools, with an allowance for board. The value of the senior scholarships is £90 a year. They are intended to enable students to complete their education at a university or at the Central Technical College. Students failing to obtain scholarships in some cases receive a bursary of £50. The London County Council also offers a number of art scholarships, some of which cover the expenses of an education, with a maintenance allowance.

There are a large number of scholarships for helping girls to obtain a training in domestic economy. The course usually lasts six months, but in some cases it may be prolonged. Some of these scholarships are given to pupils in the public elementary and others in the evening continuation schools. Scholarships covering a two years' course at the Domestic Economy Training School in connection with the Battersea Polytechnic are competed for by candidates between eighteen and thirty years of age.

A number of valuable scholarships are given by the Science and Art Department, divided into royal exhibitions, national scholarships, and free studentships. They give a free education at the Royal College of Science, London, or in the case of the two first at the Royal College of Science, Dublin. With the exception of the free studentships, they carry a maintenance grant.

In art, the Department offers to winners of local scholarships, royal exhibitions, and national scholarships, free education and a maintenance allowance. The first of these are held at a local school of art, and the exhibitions at the Royal College of Art, South Kensington, or the Metropolitan School of Art, Dublin. The national scholarships, which are held at the Royal College of Art, are restricted to students engaged in certain decorative trades. There are also certain non-competitive free studentships and travelling scholarships. Particulars of all these scholarships, exhibitions, &c., and others, can be obtained from the *Science and Art Directory* (price 6d.).

In connection with the chief musical schools in the metropolis and out of it there are a number of valuable scholarships open to women, some of them quite open, others more or less restricted. In most cases a preliminary examination in general English subjects has to be passed by candidates before they can go forward for competition in musical subjects. Such scholarships are attached to the Royal Academy of Music, the Royal College of Music, the Guildhall School of Music, Trinity College of Music

(all in London), also at the Royal Manchester College of Music, Brighton School of Music, &c.

CONTINENTAL EDUCATION.

France.—The public secondary schools are the lyceums (*lycées*) and colleges, similar in character, but the former are established by the State, the latter by the Communes. There are also private secondary schools belonging to individuals, associations, &c. There are separate lyceums and colleges for girls, and the courses of instruction extend over five or six years, the pupils being partly boarders partly day-pupils. Secondary instruction is also given to girls in various other institutions of a public character in Paris and elsewhere. The normal object of a thorough course of secondary education is the *baccalauréat*, which must be passed by all who desire to enter on a university career and thus obtain the doctorate. What was formerly known as the University of France is now represented by the Faculties of Arts (Lettres), Science, Law, and Medicine, which exist in a number of the departments of France, and perform the double function of teaching and examining. The name University of Paris, long disused, was resuscitated in 1896 in connection with the Faculties of that city; and the faculties in other cities, formerly belonging to the University of France, have also assumed the standing of local universities.

In some departments there are Free Faculties, which are usually Catholic and are not connected with the universities.

Instruction is given by means of lectures and otherwise, certain of the lectures being open to the public free of charge; the others can be attended only by registered students paying a fee of 30 francs a quarter. Women are admitted to most as registered students on the same terms as men, namely, they must hold the certificate of *bachelier de l'enseignement secondaire*. Under certain conditions the degree of a foreign university is accepted instead.

Some Faculties grant certificates to *auditeurs* (non-registered students). The conditions as to entrance and degrees vary. A few of the medical courses are closed to women.

In Paris, Lyons, Toulouse, and Lille the four Faculties of literature, science, law, and medicine are represented. The first three cities are very important centres. At Paris the Faculties of science and letters have their seat in the famous Sorbonne. Lyons has a well-equipped Medical Faculty which ranks next in importance to Paris, and has also Catholic Faculties in Arts, Science, Theology, and Law. Lille has Catholic Faculties in Theology, Medicine, Science, Arts, and Law.

Bordeaux, Montpellier, and Nancy also possess the four Faculties. Bordeaux adds to the usual equipment an astronomical and meteorological observatory, as well as a course dealing with the application of chemistry

to industries. Montpellier is also the seat of the National School of Agriculture. At Nancy there is an important *Institut Agricole*.

The Academy of Aix possesses Faculties of Arts and Law, and is connected with a Science Faculty and a School of Medicine and Pharmacy at Marseilles, and a marine zoological laboratory. Special courses in French language and literature for foreigners have been established at Aix, owing to the influence of the *Comité de Patronage des Étudiants Étrangers*, which has branches also at Lyons, Toulouse, Bordeaux, Montpellier, and Nancy.

At Caen, Dijon, Grenoble, Poitiers, and Rennes there are Faculties in Arts, Science, and Law, with preparatory medical schools.

There is a small academy at Clermont Ferrand, with Science and Art Faculties, and a preparatory school of medicine and pharmacy.

In Paris there are other advanced schools admitting women to their full advantages. Some of them grant diplomas, but they are not empowered to confer degrees. The most important are here noted.

The *Collège de France* (Place des Écoles), an institution at which gratuitous courses of lectures are delivered in almost all branches of knowledge, the professors including a number of the most eminent men in France in their respective subjects.

The *Louvre School*, giving a three years' course in archæology, intended primarily for custodians of museums and libraries. The lectures are free.

École pratique des Hautes Études, which supplies the practical instruction for the Collège de France, the Faculty of Medicine, and other educational institutions. In a few instances the professors have refused to admit women to their classes, but otherwise the courses are freely open to them.

École spéciale des Langues Orientales Vivantes, Rue de Lille, 2. Students, with some exceptions, are required to have taken a degree, and to be between sixteen and twenty-four years of age. The lectures are free to the public, but registered students are charged 100 francs a year.

Museum d'Histoire Naturelle, Jardin des Plantes. Courses of public lectures on various subjects connected with natural history are given annually free of charge. Conferences and classes of practical work are held for registered students, who also have access to the collections. Natural history excursions are organized during the summer months. Women are eligible for all the classes and scholarships.

The training colleges—*écoles normales*, of which there are many in France—receive English student teachers, *répétitrices*, subject to their passing an entrance examination. English students will find it economical to become *répétitrices* at one of these colleges, where for 400 francs a year they are provided with a private room and board. With the exception of about two hours daily devoted to teaching English, their time is their own.

Germany.—The modern development in Germany of the secondary education of girls has been largely due to the efforts of private societies, and the girls' secondary schools of a private character are still far more

numerous than the public, though there are now many of the latter also. Girls taking the whole course spend nine or ten years in attendance at these institutions. The demand for public education for girls equal to that for boys has been more fully supplied since about 1893 by the establishment in a number of towns of girls' gymnasiums or schools of similar rank, the curriculum of which includes everything that is required of boys for entrance into the universities. The course to be passed through in such institutions requires an attendance of from four to six years; in the former case a full course in a higher secondary school is necessary. At Berlin, the Victoria Lyceum, established by a Scotch lady, provides instruction of university rank but has no power to grant degrees. Similar facilities for the higher education of women, and especially for such as intend becoming teachers in higher girls' schools, are provided in other cities.

Little has been done in Germany for the university education of women. Of the German States only Baden and Bavaria allow them to matriculate on similar terms with men, and on this footing they may attend the universities of Heidelberg, Freiburg, Munich, Würzburg, and Erlangen. In other cases they are admitted to the universities as hearers merely. In a few cases the full courses have been opened to them, chiefly in the Philosophical (or Arts) Faculty, and occasionally in medicine and law, but this is only a concession of grace. Permission to attend lectures must generally be obtained from the Minister of Education for the State, and from the Rector of the university; but as the ultimate decision may rest with the professor under whom the student proposes to work, it is often advisable to apply first to him. Foreign students should send their testimonials and passports.

In no cases are the women students very numerous, but they are in attendance in greater or smaller numbers at the following universities: Berlin, Bonn, Leipsic, Halle, Breslau, Göttingen, Königsberg, Giessen, Kiel, Strasburg, Greifswald, Marburg, Tübingen, Rostock. A small number are annually promoted to the degree of Ph.D.

Austria-Hungary is more liberal than Germany, admitting women on similar terms with men both to the arts and the medical faculty.

Belgium.—In Belgium there are many higher schools, public and private, for girls; and women are admitted to the State universities at Liège and Ghent, and the free university at Brussels, but not to the Catholic university of Louvain. The Free University of Brussels and the University of Liège have technical and other departments incorporated with them.

Italy.—In Italy girls are educated in State and other schools. Women share the privileges of the universities equally with men. There are seventeen State universities and four free, the chief being those of Bologna, Catania, Genoa, Messina, Naples, Padua, Palermo, Pavia, Pisa, Rome, Siena, and Turin. At Florence and Milan there are two educational institutions of university rank, the former for arts and science and medicine, and the latter for literature and philosophy. At Rome there are schools of

archæology belonging respectively to societies of British, French, German, and American nationality. Women are admitted to courses of lectures. At Naples there is a zoological station with special arrangements for research work. Only competent persons can obtain permission to make use of the station, for which application should be made at the station or to Oxford or Cambridge University.

Other Continental Countries.—In most Continental countries the restrictions and disqualifications which have hitherto hampered women in the higher branches of education have been largely, and in some countries entirely, removed.

Switzerland was the first of the European States to admit women to the ordinary university curriculum, and women are now admitted to all the Swiss universities—Zurich, Basel, Bern, Geneva, Lausanne, Fribourg, Neuchâtel—on the same terms as men. Many come from foreign countries to study in Switzerland. At Zurich women are eligible for professorships, while Lausanne and Neuchâtel provide holiday courses in French language and literature for foreigners. Russia long continued adverse to the higher education of women, but latterly gave way, and there is now a medical school for women in St. Petersburg. Women are admitted on an equality with men to the British and the American schools of archæology at Athens.

